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ABSTRACT

Described is the diagnostic assessment system for professional supervisory competencies developed by the Special Education Supervisor Training Project at the University of Texas at Austin. An introductory section reviews such aspects as the competency-guided training model and the rationale for self-assessment. Five instruments are reviewed, and provisions for performance estimation and multiple assessors are considered in the section on data collection. Detailed are procedures for analyzing competencies in three stages: estimation of competence levels, determination of critical competency priorities, and diagnosis of specific knowledge or skill deficiencies needing development. Potential uses of assessment outcomes are seen to include skill in systematic data analysis, rational prioritizing, and examining self-perceptions. Considered in a final section are factors involved in administering the competency assessment in preservice and inservice programs. Seven appendixes include a sample orientation session agenda and an outline of events for competency analysis sessions. (CL)

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A DIAGNOSTIC ASSESSMENT SYSTEM

for

Professional Supervisory Competencies

By

Michael C. Evans

and

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Document #11
Special Education Supervisor Training Project
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Preface

The problem of assessing professional competencies is central to the entire effort of recent years to train and evaluate professional educational personnel on the basis of competence—the capacity to perform. The diagnostic assessment system described in this document has been developed in response to an urgent need for competency assessment in the area of instructional leadership performance. As in teacher education, the programs for the education of administrators and supervisors have been and are undergoing substantial change. The success of programs for the improvement of instruction in schools and colleges depends in important ways on our ability to assess both trainees and graduate practitioners on the basis of leadership competence.

The diagnostic competency assessment system developed through the Special Education Supervisor Training Project is one that is described herein for the guidance of training coordinators and program directors. The assessment system is made operational as described in this document through the use of a battery of assessment instruments, procedural manuals, and workbooks, all designed for coordinated use in either preservice training programs or in in-service professional growth situations.

Assessment procedures in this system are designed to yield essentially diagnostic information for use in guiding the professional growth process. Accordingly, self-analysis is emphasized, using a carefully programmed analysis structure to assure optimum levels of both objectivity and personal involvement. The system does <u>not</u>, on the other hand, attempt to impose prescriptions on either the person being assessed, instructors, or the program.

The competency specifications upon which this assessment system is based are exclusively instructional in nature. Twenty-four Critical Supervisory Competencies were selected as the criteria on which all assessment instruments and procedures are based. These Critical Competencies along with eighty-one associated Major Competencies are specified in detail in another document.* While the rationale for this competency assessment system might be quite adaptable to other sets of performances, the system as described here is appropriate only for those personnel who are engaged in instructional leadership endeavors in school and college situations. We call them Professional Supervisory Competencies.

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Training Project
The University of Texas at Austin
January, 1976

*Professional Supervisory Competencies, Document #7 (Revised). Special Education Supervisor Training Project. Austin, Texas: The University of Texas at Austin, 1975.

ACKNOWLEDGEMENTS

This document is one of the last of an array of writings emanating from the work of students, faculty and staff associated with the Special Education Supervisor Training Project 1972-1975. As a near-final product of this project its authors owe much to many antecedents -- people and events. As the document describing the entire competency assessment system, its authors have necessarily drawn upon the enormous contributions of program designers, instrument developers, and field collaborators who were associated with the SEST Project over the years.

In acknowledging these many contributions of numerous individuals, the list of Project Faculty and Staff in the Appendices should get special attention. Additionally, the assistance of the Council for Exceptional Children, the University Council for Educational Administration, the Association for Supervision and Curriculum Development, the National Conference of Professors of Educational Administration, the Hawaii Association for Supervision and Curriculum Development, the Southern Association of Colleges and Schools, and the Texas Education Agency, Division of Special Education cannot be overemphasized. Each of these professional groups provided opportunities for testing and revising the competency assessment system so as to make this document a reality.

A special note of thanks is due the Department of Educational Administration at the University of Texas at Austin, especially Professors Michael P. Thomas, Jr., Kenneth E. McIntyre, E. Wailand Bessent, John Roueche, Leonard A. Valverde and James R. Yates for their direct assistance and encouragement throughout the development period through which the assessment system has passed.

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I. INTRODUCTION

The competency assessment system described in this document is one of a number of products developed by the Special Education Supervisor Training Project. This project is aimed to apply the principal elements and methodologies of competency-based teacher education to the preparation and continuing education of professional leadership personnel concerned with improving the quality of instruction in the public schools. Among the project's other products were a set of professional supervisory competencies, an annotated bibliography of commercially available training materials and a set of independent study modules. This competency assessment system, including an array of instruments, workbooks and manuals, is the last product of the project. (See Appendix A - Available Documents and Materials.)

Before progressing to the description of the assessment system, it may be helpful to review briefly certain key concepts which emerged from the project's efforts regarding the nature of competencies and the purposes of leadership training.

The Meaning of "Competency"

Various types of competencies are referred to in this document. The term "competence" as distinguished from "competency," refers to a demonstrated ability to perform a pattern of behaviors at some level of proficiency over a span of time. A "competency," on the other hand, is a statement describing a task relevant pattern of behaviors. Obviously, the complexity and variety of knowledges and skills included in various competency statements will vary depending on the task involved. Moreover, in examining leadership behavior, it has become apparent that many competencies can be seen as generic to successful task accomplishment. Certain problem

solving skills, for instance, are likely to be required in many situations involving quite different tasks. Similarly, human relations skills are likely to be widely applicable to curriculum development, in-service education, and staffing tasks alike.

In order to bring some kind of order to the many possibilities involved in combining competencies of both specific and generic character, the concept of a Critical Competency evolved. These competencies are statements describing complex behavior patterns that can be demonstrated in actual job situations. The number of Critical Competencies specified for use in any particular leadership training program will vary depending upon the kinds of leadership positions participants are expected to assume. The SEST Project was concerned with instructional supervisor positions. The twenty-four (24) Critical Competencies selected and specified are presumed to be most crucial to professional practice in these positions. (See Appendix B.)

Another class of competency referred to frequently in this document are known as Major Competency statements. Major Competencies are conceived as subsets of Critical Competencies that have been derived by subdividing the more complex behaviors into logical, distinguishable components. The resulting competency statements are much more specific descriptions of behaviors which can be observed in actual practice. While not stated as behavioral objectives, these competencies are sufficiently specific to be directly associated with instructional materials and training activities. Eighty-one (81) Major Competencies have been selected for use in developing the competency assessment system.

It should be noted, however, that due to the complexity of the Critical Competencies an enormous number of Major Competencies could be derived. The eighty-one referred to here are selected sets of those deemed most important to successful practice. Similarly, the twenty-four Critical Competencies

are a selected set from among a larger number that might be specified. They were derived in such ways as to represent critically important competencies in each of seven essential task areas related to the improvement of instruction in most school and college settings. These task areas, described in more detail elsewhere,* include:

A - Developing Curriculum
B - Developing Learning Resources
C - Staffing for Instruction
D - Organizing for Instruction
E - Utilizing Supporting Services
F - Providing In-Service Education
G - Relating to Publics

The Competency-Guided Training Model

Another concept related to leadership training has implications for the design of the assessment system. Typically, competency-based or performance-based programs have tended to specify rather formal sequences of learner objectives. In such programs, a criterion level performance of each of these behaviorally-defined objectives is designated as the basis for receiving credit, graduating and/or being certified.

In seeking to expand and improve on existing competency-based programs, the concept of "competency-guided instruction" has been developed to alter the use of competency specifications in the training process. In effect, a competency-guided program leaves responsibility for prescribing and selecting training activities to those most directly involved and responsible. The trainee, whether in a preservice or an in-service program shares responsibilities with instructors and advisors. The competencies serve to guide these program decision-makers in the process of selecting from among the wide variety of learning methods and materials available. This eliminates the necessity for linear sequencing of activities, allows greater

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*Task areas are defined in Professional Supervisory Competencies (Document #7): Austin, Texas: Special Education Supervisor Training Project, The University of Texas at Austin, 1975. Similar task areas are discussed in detail in Ben M. Harris' Supervisory Behavior in Education (2nd Edition). Englewood Cliffs: Prentice-Hall, Inc., 1975.

flexibility in the selection of learning activities, and gives the learner a more central role in planning and implementing training.

Requirements of the Assessment System

The special characteristics of Critical Competencies and the nature of the assumptions about their use in training pose unique problems for the development of a viable assessment system. To begin with, the purpose of assessment itself must be expanded somewhat to include the management of all information pertaining to programmatic decision-making. This requirement subsumes more traditional functions such as measurement and evaluation but makes them subordinate to the more general issue of information processing and feedback.

Hence, the assessment process includes provisions for the collection and treatment of a variety of information, some of which may be unrelated to performance per se. Consider, for example, the large number of Critical and Major Competencies associated with instructional supervision. In the course of any year long training program, whether it be conducted in a preservice or in-service setting, it would be manifestly impossible to conduct training activities associated with each and every competency. In this situation it is obvious that some means must be developed to assist in determining competency priorities. To do this other variables must be considered in addition to performance levels. While it is not possible to program all such variables, a few of them can be quantified, and the system is designed to assure that these are treated systematically.

Direct vs. Indirect Measurement

Over the past few years, the term competency-based education has become synonomous with an assessment approach based heavily on the development of direct observation assessment procedures. This approach is a direct

outgrowth of the movement's emphasizing the demonstration of behaviors as the criteria for graduation or certification. The central question is not whether the trainee knows something, but rather, can a performance acquired in a classroom, field, or laboratory setting be translated to an actual job environment? In measurement of such performances the concern is with the level of inference implicit in the particular instrumentation being used. Thus, a paper-and-pencil test requires a higher level of inference in predicting success in actual practice than does, for example, a structured observation which requires that an assessor observe the trainee actually demonstrating the desired behavior in a real or simulated practice setting.

There is little argument against the desirability of direct observation as the measurement method of choice, whenever possible. On the other hand, experience with performance-based assessment has made it obvious that operationalizing assessment systems in which direct observation in either real or simulated settings plays a central role is a tremendously complex, costly undertaking that requires great expenditures of much time and manpower resources. Moreover, direct observation systems tend to generate such large volumes of data that it becomes increasingly difficult to "handle" the data much less determine the meaningfulness of any particular measured event. In almost every case, this handling problem has been met through the development of sophisticated machine data processing and multivariate analytical procedures. Such assessment systems tend to lack flexibility for adoption by various institutions and settings. The specific programs for which they are originally developed tend to be the only adopters. Such complex assessment systems also tend to remove the trainee from the assessment process in many significant ways.

The SEST Project has placed much emphasis on the transportability and flexibility of the competency assessment system. This system has endeavored

to be appropriate for use by both local school districts in developing in-service programs and by colleges and universities in conducting preservice programs. This objective virtually ruled out reliance on direct observation techniques to collect data. The alternative, of course, is to rely on so-called paper-and-pencil tests to measure the opinions, attitudes, and judgments. As noted, however, such measures also present problems especially with respect to face and predictive validity. Insofar as the feasibility requirement made this dilemma unavoidable, a simplified form of multivariate analysis has been developed for treating the paper-and-pencil data after it has been collected; simplified, because the feasibility restraint applies to data analysis as well as to data collection. Thus, the system which will be presented in the sections that follow is not being offered as an ideal approach to the assessment of competence; rather, it represents an attempt to reconcile the conflicting needs for adequate levels of reliability and validity on the one hand, with practicality and flexibility on the other.

Purposes of the System

Naturally, when discussing the necessity to compromise the ideal and the practical, the issues of validity and reliability of measurement become of paramount concern. One way to approach these issues is to examine the purposes which the data will serve. From the standpoint of evaluating a program, data is typically required to measure growth or terminal outcomes and to assess the impact of various aspects of the instructional environment (i.e. programmed events such as curriculum; consequent events such as reinforcement schedules). Another purpose that performance data might serve is as an aid to program administrators in determining levels of performance capability upon which the conferring of degrees or formal certificates can be based. In order to adequately serve either of these purposes, the

the reliability and validity of the performance data are extremely important. In practice, because of demanding costs and complexities, these purposes are rarely well served.

Still another purpose, however, can be identified which is essentially diagnostic in nature. The diagnostic purposes involve the estimation of an individual's current status without regard to the functioning of other individuals or to the effect of the training activities themselves. In diagnosis the concern is with identifying relative strengths and weaknesses, prioritizing the latter, and delineating of individual training needs. The advantage to be gained in limiting the use of assessment data to serve diagnostic purposes is that the data needs to be only precise enough to provide indicators of comparative strength for each of the competencies in question. It is for this diagnostic purpose that the performance data generated by the assessment instruments and analysis procedures described in this document are intended.

The Self-Assessment Problem

The diagnostic assessment system utilizes assessee self-report data to a much larger extent than is typically the case in competency assessment. The reason for this is twofold: First, such data are easier and less costly to collect and, hence, more feasible in the applied setting. Also, it can be argued that assessees have much relevant information upon which to base evaluations of their performance capabilities. This is especially true when the availability of other assessors is limited. To illustrate, the assessment of the entry-level proficiency in preservice programs is a very difficult problem because the training staff has such limited opportunities to become acquainted with the assessee, and their judgments can hardly be valid on the basis of a few initial meetings. Of course, this is not to say that

assessments by others should not be used whenever possible. However, data from recent employers, even when available, are likely to lack validity.

Traditionally, self-assessment data have been misused, ignored, or at the very least, regarded with suspicion due to inherent subjectivity. The prevailing view is that assessees will tend to distort their own data in order to effect a more favorable appearance. There is reason to believe that such distortions also result from lack of accurate self-perception by the assessee. Here again, the problem is the low level of reliability and validity of the measures. This assessment system attempts to deal with this problem by using a variety of self-assessment procedures and subjecting these data to a fairly rigorous analytical procedure designed to compensate for the assumed distortions.

A second reason for using self-report measures is that it reinforces the central role trainees are expected to assume in the competency-guided training model. One of the major advantages of individualized instruction programs is that, presumably, trainees learn to assume responsibility for their own growth. The competency-guided model operationalizes this notion by giving trainees full membership in the decision-making process from which their personally tailored programs of training activities will emerge. The use of self-report procedures in the assessment system reinforces this process by assuring that the decisions made will be based on data which include the assessee's own self-perceptions; and by conveying the idea that <u>self-perceptions</u> are legitimate data to be considered in making important decisions.

Moreover, the procedure guarantees that assessee attention will be constantly focused on the development of higher levels of competence and that an intimate familiarity with the competencies, as specified, will be developed and maintained.

In the consideration of the issues outlined above, the assessment system described in the pages that follow was developed to include the following design specifications:

1. The assessment procedures constitute a comprehensive, decision-serving information feedback system.

2. The system can be feasibly applied in both preservice and in-service training situations.

3. Performance data required are easy to collect, reduce, and analyze.

4. The cost of data collection and analysis in terms of manpower, materials and time offers no barrier to use by individuals or schools with limited resources.

5. The assessment system involves the assessee directly in the measurement, analysis, diagnosis and decision-making processes.

6. The assessment system is essentially diagnostic, and not concerned with progress rates nor with standards of overall attainment.

7. The assessment system organizes and presents a variety of information required for making training decisions.

8. The assessment system, while diagnosing needs, does not prescribe training activities. Prescription is left to the assessee and training advisors.

9. The analysis process is highly structured to demand a rigorous, systematic, logical series of data use procedures.

Design of the System

The instruments and procedures constituting the diagnostic competency assessment system have been designed for use at three different points in a sequence of training activities. Pre-assessment, in-progress assessment and post-assessment phases are provided for in the system. Two procedural manuals, one for pre-assessment and another for in-progress and post-assessment, contain detailed instructions for collecting and analyzing the data for each assessment phase.

Each of the three assessment phases consists of three classes of activities:

(1) Activities related to the collection of assessment data;

(2) Activities directed toward analyzing the data after they have been gathered;

(3) Activities related to planning training experiences.

The first set of activities related to data collection involves completion of a battery of test instruments, each aimed at assessing various aspects of competence. While the battery itself does not vary across assessment phases, the guidelines used in completing the instruments are somewhat different for each phase. Moreover, during in-progress and post-assessment provision is made for the collection of data from multiple assessors.

The second and third set of activities, analysis of the data, and planning for training have been organized in sequential stages concerned respectively with estimating competence levels for each Critical Competency, determining Critical Competency priorities, diagnosing training needs, and specifying training activities. The flow chart in Figure 1 provides an overview of the steps required to complete the assessment sequence.

Pre-assessment procedures are utilized whenever no recent efforts at systematic assessment and training have been undertaken by the assessee. These procedures are also based on the assumption that "other assessors" are not readily available to assist in completing competency assessment instruments.

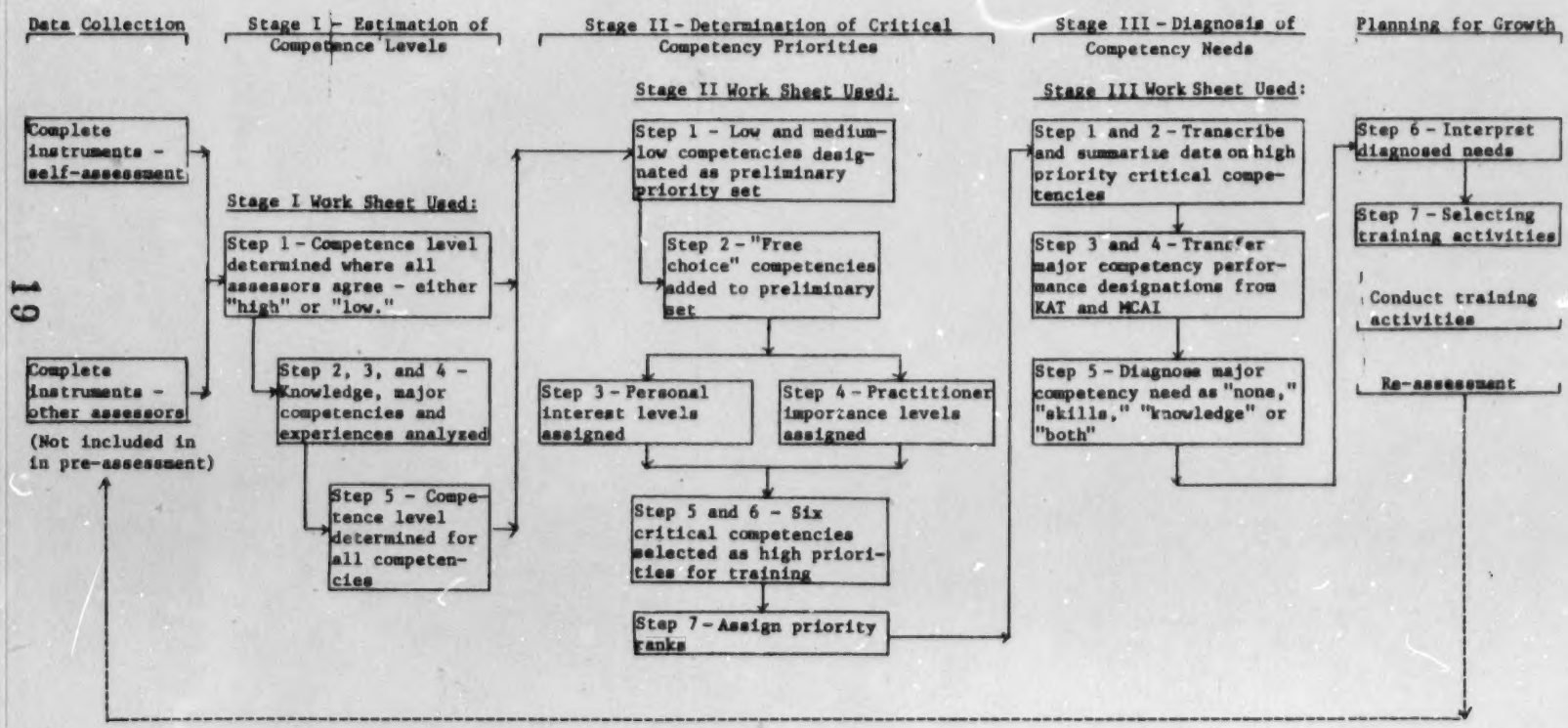
In-progress assessment procedures are utilized when a relevant training program has been in-progress, and other assessors are available. The

same set of assessment instruments are utilized as with self-assessment. Other assessors of two types complete the CCPI only. One other assessor should be familiar with the "skills" of the assessee as seen in actual practice. The second external assessor is one who knows the assessee's ways of thinking and his or her ideas well. All CCPI instruments used at this in-progress phase are Form B - Forced Choice, requiring all respondents to identify relative strengths and weaknesses in equal numbers. Similarly, the MCAI completed at this time by the assessee employs the forced choice format.

Post-Assessment is essentially a repeat of pre-assessment except that other assessors are utilized. Since unrestricted responses are called for at this phase, all respondents can fully describe the range of competence that exists and progress can be fully documented.

Figure 1

A FLOWCHART OF EVENTS FOR DIAGNOSTIC ASSESSMENT


Data Collection
Stage I - Estimation of Competence Levels
Stage II - Determination of Critical Competency Priorities
Stage III - Diagnosis of Competency Needs
Planning for Growth
Stage II Work Sheet Used:
Stage III Work Sheet Used:
Complete instruments - self-assessment
Stage I Work Sheet Used:
Step 1 - Competence level determined where all assessors agree - either "high" or "low."
Step 2, 3, and 4 - Knowledge, major competencies and experiences analyzed
Step 5 - Competence level determined for all competencies
Complete instruments - other assessors
(Not included in in pre-assessment)
Step 1 - Low and medium-low competencies designated as preliminary priority set
Step 2 - "Free choice" competencies added to preliminary set
Step 3 - Personal interest levels assigned
Step 4 - Practitioner importance levels assigned
Step 5 and 6 - Six critical competencies selected as high priorities for training
Step 7 - Assign priority ranks
Step 1 and 2 - Transcribe and summarize data on high priority critical competencies
Step 3 and 4 - Transfer major competency performance designations from KAT and MCAI
Step 5 - Diagnose major competency need as "none," "skills," "knowledge" or "both"
Step 6 - Interpret diagnosed needs
Step 7 - Selecting training activities
Conduct training activities
Re-assessment

II. DATA COLLECTION

Each assessment phase begins with the collection of data using a test battery that consists of five different assessment instruments. Four of the instruments provide estimates of each Critical Competency. The fifth instrument, an interest scale, is used to obtain the assessee's personal perceptions of the relative importance of each Critical Competency to his or her unique professional situation.

Instrumentation

The five instruments described below consist of two Q-sort techniques, a paper-and-pencil test of cognition, an activity checklist for inventorying experiences, and an interest scale. All of the assessment instruments contain complete instructions for self-administration and scoring sheets are included for recording responses.

The five instruments are described briefly as follows:

1. Critical Competency Performance Inventory (CCPI). The CCPI contains a set of twenty-four sheets describing the Critical Competencies in performance terms. Each sheet provides a statement of a competency, a rationale, and an illustrative example. The directions call for the assessor to sort these competencies into six categories that reflect the assessee's performance levels. (Time: 30-45 minutes)
2. Major Competency Assessment Inventory (MCAI). The MCAI is an instrument used to assess performances on a set of eighty-one Major Competencies that have been identified as logical components or subdivisions of the complex behavior patterns comprised by the

Critical Competencies. The individual Major Competency statements are contained on eighty-one cards that are sorted into six categories reflecting the assessee's performance levels. These performance estimates are recorded on a score sheet used to produce a performance designation for each Critical Competency.
(Time: 60-80 minutes)

3. Competency-Keyed Experience Inventory (CKEI). The CKEI consists of a checklist of 158 different activities related to the twenty-four Critical Competencies. The person being assessed uses the checklist to report his or her level of past experience with each activity. These activity scores are then combined on a score sheet to produce a performance designation for each Critical Competency. (Time: 60-75 minutes)
4. Knowledge Assessment Test (KAT). The KAT is a multiple-choice, paper-and-pencil test of cognition, consisting of items keyed to the Critiical Competencies. It provides two scores, one reflecting the assessee's level of knowledge in relation to each Major Competency, and a performance designation for each Critical Competency. (Time: 80-90 minutes)
5. Critical Competency Interest Scale (CCIS). The CCIS is an interest scale for rank ordering the twenty-four Critical Competencies. The person being assessed reports his or her judgments as to the importance of each Critical Competency in planning his or her professional growth program.
(Time: 15-20 minutes)

Performance Estimation

Throughout the assessment system, all performance scores in raw data form are characterized as performance estimates. The use of the term "estimate" is intended to acknowledge the imprecise nature of scores derived from these types of test instruments. Taken alone, such scores would have little predictive or face validity. The structured data synthesis procedures contained in the first stage of the data analysis section of the assessment system provide a means of increasing the accuracy of the estimates through a fairly rigorous method of comparing and contrasting scores obtained from the various instruments and assessors.

Before proceeding with data analysis, all raw data performance estimates are transformed to standardized performance designations. Directions for performing this transformation are contained on the individual instrument score sheets and the changes are completed in the course of recording the raw data. This procedure results in a standardized proficiency measure which enables scores on one type of instrument to be compared with scores from another type. Performance designations are given as either "high" (H), "medium" (M), or "low" (L). Of course, in reducing test scores to these rather basic units, much potentially useful information is lost. Nevertheless, the reductions are necessary in order to make the data manageable for manual analysis. Moreover, in considering the loss of data, it is important to keep in mind the purpose for which the data is intended. In this system performance scores are used only as diagnostic indicators of proficiency, not as evaluative criteria. To this end, these data, when subjected to the competency analysis procedures to be described in the sections that follow, have provided adequate levels of performance differentiation.

Phases of Competency Assessment

The materials and procedures for assessing Critical Competencies have been designed for use at three different points in a professional growth sequence: (a) pre-assessment; (b) in-progress assessment; (c) post-assessment. The data collection and competency analysis procedures vary slightly at each assessment phase in order to take into account variations in the prevailing conditions and sources of performance information available. The major difference between pre-assessment and the other two phases, in-progress and post-assessment, is that pre-assessment utilizes only self-assessment data. In the two subsequent phases, it is assumed that "other" assessors are available who have become sufficiently familiar with the assessee to be able to provide reasonably accurate assessments of his or her performance of the Critical Competencies.

A second major distinction between assessment phases concerns the guidelines for sorting the competency statements on the two Q-sort instruments (CCPI and MCAI). At both pre-assessment and post-assessment the two instruments are administered under unrestricted response conditions, and the performance guidelines are described in absolute terms. This means that assessors are free to assign as many competencies to a performance category as is deemed appropriate and the estimates thus obtained represent their best judgments of the assessee's actual level of performance.

On the other hand, at in-progress assessment, the two instruments are administered under forced-choice response conditions and the performance guidelines are described in relative terms. This means that the assessors must sort a predetermined number of competencies into each of the six performance categories and the performance estimates thus obtained represent judgments of the assessee's performance of a given competency

only in relation to his or her performance of the other competencies. For both instruments the forced distribution of responses is designed to approximate a normal curve in accordance with traditional Q-sort practice.

The rationale for using these two types of distributions, forced-choice and unrestricted, is related to differences in purpose between assessment phases and to the special problems presented by each phase in attaining the desired results. In terms of the overall purposes of the diagnostic assessment system, diagnosing individual training needs, a relative performance assessment would probably be adequate at each assessment phase. It is also likely that measurement purists would argue for the use of a forced-choice distribution and would cite the smaller standard error of measurement as the basis for their preference.

In opting for the unrestructed distribution, however, two factors have been of central concern. First, the loss of accuracy in measurement due to an increasing standard error of measurement was not regarded as a serious one since raw scores are regarded only as estimates anyway. Furthermore, at pre-assessment where only self-report data is utilized, the performance estimates are already biased by the subjectivity implicit to this type of data. Another source of error variation is related to the lack of a formalized, normative criteria against which an individual assessee's performance can be contrasted. In comparison to the magnitude of error introduced by these factors (i.e. subjectivity and ambiguity) the increase in error due to the utilization of an unrestricted response distribution is regarded as relatively minor.

Second, at pre-assessment the unrestricted response distribution offers certain advantages with respect to the intended outcomes of the system. An unrestricted response distribution does not preclude drawing relativistic

conclusions, i.e., a "low" performance estimates for a given Critical Competency is interpreted as the "lowest" performance by a given assessee in relation to his performance of other competencies. Instead, it adds information by enabling the assessee to communicate impressions of the actual level of competence he or she believes himself capable of performing; information which, if interpreted with due caution, can be very useful to the training advisors when attempting to guide or counsel the assessee in making priority decisions. So long as the performance estimates obtained are interpreted cautiously and are inteded only for use in this guidance function, the unrestricted response distribution is advantageous.

Another advantage in utilizing the unrestricted response at pre-assessment is psycho-motivational. With due respect for the lack of precision involved in these measures from an objective point of view, this approach gives some assurance that the perceived high and low performance capabilities of the assessee will be identified. This provides an opportunity to demonstrate the concept that the trainee must assume the major responsibility for both defining professional growth needs and for directing learning efforts accordingly. It may also be presumed that in the absence of "hard" data with which to guide the assessee, the self-assessment data will be utilized with more rigor and confidence if forced choices are avoided.

Unrestricted responses are still utilized in post-assessments even though conditions are substantially different. Self-perceptions of the assessee are presumably more realistic at the post-assessment time. They can be readily verified by the estimates of other assessors and hence, inflated estimates are likely to be minimized and detected. For placement and follow-up evaluation purposes, it seems essential that the post-assessment estimates be unrestricted rather than forced to the point of requiring

entirely relativistic interpretations. Assessees should be helped to understand these differences in purpose and application before completing the diagnostic assessment system.

Multiple Assessors

One of the major provisions of the Diagnostic Assessment System is for the extensive use of self-report data; but, because of the subjectivity present in self-assessment, it is also important to collect data from other knowledgeable sources whenever possible. Even when data are secured from other assessors, however, the individual being assessed still constitutes the primary source of information about his own abilities.

At pre-assessment, other persons who are familiar with the assessee's work and with the Critical Competencies may not be available. Therefore, at pre-assessment, data are collected only from the individual being assessed using the data collection instruments as self-report procedures.

On the other hand, at in-progress and post-assessment phases, other knowledgeable assessors are quite likely to be available. Hence, these two phases each provide for two additional administrations of the CCPI, one to a person designated as a knowledge assessor, the other to a person designated as a skills assessor. These two additional assessors are required when conducting either the in-progress or post-assessment phase of the assessment system. The descriptions provided below are intended to assist in designating particular individuals for these two roles.

Knowledge assessor. The knowledge assessor needs to be a person who is familiar with the assessee's level of comprehension and understanding of the knowledge prerequisites to successful performance of the competencies. This person's assessment will be based upon his or her perceptions of the

candidate's understanding of concepts, principles, and professional practices. In a preservice training program, the knowledge assessor could be a faculty advisor, course instructor, or other person who has interacted extensively with the assessee in an academic context. In an in-service professional growth program, the knowledge assessor could be a superordinate or a colleague who has had opportunities to discuss, plan, and listen to an assessee express ideas. This person might be a superintendent, a program administrator or director, or an outside consultant.

Skills assessor. The skills assessor should be a field practitioner who has had many opportunities to observe an assessee performing in a job situation. This person's assessment will be based upon his or her perceptions of the ability to successfully perform. In a preservice training program, the skills assessor could be a practicum or fieldwork supervisor who supervises an assessee in practice situations. In an in-service professional growth program, the skills assessor could be anyone who has extended contact with the candidate as he or she carries out daily responsibilities as a professional practitioner. This person might be a principal, a teacher, a peer, or a program director who has spent a great deal of time observing in the field or working directly with the assessee.

III. COMPETENCY ANALYSIS

The actual procedures for conducting each assessment phase in its entirety are detailed in two users manuals (Special Education Supervisor Training Project Documents #12a and #12b) with accompanying workbooks. These documents are intended for use by assessees to guide the self-assessment process. Document #12a "Procedural Manual for Pre-Assessment" contains the procedures required to conduct the pre-assessment phase; Document #12b contains procedures required for in-progress and post-assessment. Each manual requires the use of a consumable workbook containing work sheets specific to each stage in the competency analysis. Due to the difference in the number of assessors available at pre-assessment, the Stage I procedures for pre-assessment are somewhat different from those for in-progress and post-assessment. Accordingly, the Stage I work sheets for each of the two manuals have somewhat different formats and care must be taken to assure that the correct manuals and workbooks are provided at each assessment phase. Stages II and III are exactly the same for each manual (assessment phase) and the corresponding Stage II and III work sheets are also exactly alike.

Documents #12a and #12b are self-contained instructional manuals for conducting the assessment system. Each manual contains detailed instructions for identifying the required instruments and assessors, completing the assessment instruments, and conducting the entire competency analysis. Program advisors and administrators need only assure that the correct number of instruments and the appropriate manuals and workbooks are available to each assessee.

Stage I: Estimation of Competence Levels

The purpose of Stage I in each of the assessment phases is to synthesize and analyze the obtained performance data in order to arrive at an overall estimate of the assessee's performance level with respect to each of the twenty-four Critical Competencies. Throughout Stage I, the basic unit of analysis is the performance designation for each Critical Competency obtained from the assessment instrument score sheets. These designations are analyzed only in terms of how they reflect, as a whole, on the total configuration of behaviors composing the Critical Competency. Later, in Stage III, certain Critical Competencies are reanalyzed with attention focused upon the associated Major Competencies.

In Stage I of the competency analysis, the assessee is led through a series of steps that yield a competence level for each Critical Competency. Each competence level is derived from the performance designations (H, M, L) on the assessment instrument score sheets and is recorded as one of the five letter designations, H (high), MH (medium-high), M (medium), ML (medium-low), or L (low). This procedure classifies the Critical Competencies into categories that reflect ordinal differences in the estimates of the assessee's level of competence. The "competence levels" are inversely related to the importance that the assessee's current proficiency will have in determining (in Stage II) priorities for further competency-keyed training; i.e. a Critical Competency having a "low" (L) competence level would be regarded as of higher priority than competencies assigned any of the other competence levels.

The meaning of the competence levels. It cannot be stressed too strongly that the competence levels obtained in Stage I are simply refined estimates of an assessee's competence that are intended to guide in the

identification of competency needs and the selection of competency-keyed training activities. Any other use or interpretation of the competence levels, such as using them to determine if an assessee is ready for graduation or certification, or to evaluate an assessee's progress through a training sequence, is inappropriate.

The competence levels do reflect on an assessee's competence, but, as used here, "competence" must be interpreted with considerable caution. At the in-progress assessment phase, when forced-choice guidelines for the CCPI and MCAI are used, a competence level for a given Critical Competency can be interpreted only in relation to the competence levels obtained for each of the other twenty-three Critical Competencies. For example, the highest of the five competence level designations,"H", does not necessarily indicate that the assessee is functioning at a high level of mastery relative to the general population of instructional supervisors; rather, it indicates an estimate that performance of a given competency is "better" than performances of other competencies.

On the other hand, at pre- and post-assessment, when unrestricted response conditions are in effect, the performance guidelines require assessors to make absolute rather than relative performance estimates. This procedure assumes that the assessors are people who are quite familiar with the field of instructional supervision and are able to make reasonably accurate judgements of the general level of proficiency found among employed practitioners. It also assumes that the assessors have had adequate opportunity to become acquainted with the assessee's general level of functioning. Given that these assumptions will be met only in varying degrees in individual instances, the competence level can be interpreted, at best, as an estimation of an assessee's probable

level of competence. This is especially true at pre-assessment where only self-report assessment procedures are in use. Since the basic assessment data is constituted predominantly of the opinions, beliefs and judgments of the assessors, whose evaluations are made in relation to an unknown normative criterion, the overall validity of the estimates is unknown. The Stage I procedures described in the sections that follow have been designed as rigorous and systematic processes for obtaining the most accurate estimates possible from the available data. Nevertheless, a competence level of "H" at pre- or post-assessment (using unrestricted guidelines) does not necessarily mean that an assessee is highly competent; rather, it indicates a high probability that the assessee can demonstrate competencies. It is very important that all assessees, training advisors, and program administrators fully understand the meaning of competence levels and the purposes for which they are intended before beginning the data collection procedures in order to minimize tendencies to bias or distort the data.

Pre-assessment. The purpose of the first step in Stage I during pre-assessment is to synthesize the performance designations from the CCPI, MCAI, and CKEI in such a way that each of the twenty-four Critical Competencies is placed into one of two preliminary diagnostic categories: (a) performance level adequately determined; (b) performance level not adequately determined. This preliminary classification is based upon the extent to which the designations on each of the three instruments are in agreement as to the assessee's competence level for any particular competency.

Two primary considerations are reflected in the Step 1 procedure for estimating competence levels. The first is one of practicality and economy of effort. Because the system will often be completed manually by assessees themselves, it is desirable to reduce the number of Critical Competencies requiring extended analysis as quickly as possible. The second consideration follows from the first in that it then becomes necessary to decide at what point the data is sufficient to conclude that a competence level can be assigned.

Ten possible patterns of agreement among the performance designations are shown in Figure 2 below using the three assessment instruments. The decision rule adopted is that only two of the ten patterns depicted are sufficiently unambiguous to permit the Critical Competency in question to be assigned to an overall competence level other than "indeterminate" at this initial step in the competency analysis.

Pattern #1, in which the three scores agree in estimating the assessee's performance level to be "high;" and pattern #2 in which the three scores agree in estimating the assessee's competence to be "low" are clearly unambiguous. In the remaining eight patterns, the three scores either are not

Figure 2

Ten Possible Patterns of Agreement
Among Performance Designations
At Pre-Assessment

Agreement Pattern	No. of Instruments on which the Performance Designation Is:			Overall Competence Level Is:
	High	Medium	Low	
1	3	0	0	High
2	0	0	3	Low
3	0	3	0	Indeterminant
4	2	1	0	Indeterminant
5	2	0	1	Indeterminant
6	1	2	0	Indeterminant
7	1	0	2	Indeterminant
8	0	2	1	Indeterminant
9	0	1	2	Indeterminant
10	1	1	1	Indeterminant

in agreement in their estimates of the trainee's competence level or are agreed that the level falls into a "medium" range; in all of these cases additional clarification is desirable either because the three designations are clearly at odds or because the judgment "medium" is suspected of being an arbitrary interpretation at this point in the assessment procedure.

Basically, the problem of determining competence levels for the eight "indeterminate" patterns is a validity problem. Consider, for example, a Critical Competency for which all three estimates differ. If the three estimates were valid in spite of their differences, it would be necessary to assume that they reflect somewhat different aspects of performance. Consequently, it would be difficult to place that Critical Competency into a single proficiency category. The situation would be similarly ambiguous

in the case where two estimates differ from the third. In either case, additional clarification is desirable before assigning a competence level to the Critical Competency.

On the other hand, since only self-assessment data are collected in the pre-assessment phase, the estimates provided by the CCPI, MCAI, and CKEI are likely to contain subjective bias and some means of compensating for such probable distortion is needed. This is accomplished in subsequent steps by combining the performance designation from each of these three instruments with the KAT performance designation for each of the Critical Competencies in question to obtain three adjusted performance estimates. The three adjusted scores are ultimately combined additively in the final step in Stage I to produce an overall competence level for each Critical Competency. These procedures are based upon the assumption that when the performance designations from the CCPI, MCAI, and CKEI are disparate (i.e. do not agree), error is present in unknown degree of magnitude and direction in one or more of them. This error cannot be eliminated, but its effect can be reduced by altering the performance estimate in the direction indicated by the most objective measure available (i.e. the KAT score).

Parenthetically, the decision to assign a competence level when all three estimates are in agreement in effect assumes that the error present is either negligible or is self-canceling across instruments. The other possibility, that error is present and consistent across instruments, is a risk that is deemed acceptable since all pre-assessment competence levels are regarded as tentative. The in-progress and post-assessment phases following later in the training program also constitute checks on the competence levels assigned at pre-assessment, thus assuring that competencies inappropriately excluded from the training program because of an

incorrect competence level will be reconsidered in detail later in the training sequence.

Three parallel steps for deriving the adjusted performance estimates. The procedures described in steps 2, 3 and 4 of Stage I involve the systematic application of a logically defined contingency rule. The rule is illustrated in Figure 3. The rows of the matrix in Figure 3 correspond respectively to the performance designations "high" (H), "medium" (M), and "low" (L) obtained from the KAT. Similarly, the columns of the matrix correspond to the performance designations from the CCPI, MCAI, or CKEI. The cells in the matrix represent nine possible outcomes obtainable from each of the three comparison pairs. As noted previously, after the three adjusted values have been derived, they will be combined additively to produce competence level designations. In order to prepare the data for this additional procedure, the adjusted estimates are given as the numerical values shown in each cell of the matrix.

Figure 3
Numerical Values Reflecting
Adjusted Performance Designations

KAT Performance Designation	H	M	L
H	5	4	3
M	4	3	2
L	3	2	1

Performance Designations
from the CCPI (Step 2),
MCAI (Step 3), or CKEI (Step 4)

For each Critical Competency for which a competence level was not obtained in Step 1, Step 2 yields the number designated as the "C-K value" which represents the outcome of the CCPI-KAT comparison. Step 3 yields a number for the "M-K value" derived from the MCAI-KAT comparison; Step 4 yields an "E-K value" which obtains from the CKEI-KAT comparison.

Combining adjusted estimate values is accomplished in Step 5 by adding the three numerical indices to obtain a total score for each Critical Competency involved in the extended analysis. A simple conversion rule, illustrated below, is used to translate the totals into a lettered competence level designation.

Inspection of the conversion rule reveals that the intervals are unequal (i.e. four units for the low designation; three units for medium-low; two each for medium, medium-high, and high) in favor of the low and medium-low competence levels.

Figure 4

Illustration of a Conversion Rule for Deriving Competence Levels

If the sum of the C-K, M-K, & E-K values is:	Then the Competence level is:
14 - 15	H
12 - 13	MH
10 - 11	M
7 - 9	ML
3 - 6	L

This makes the rule conservative and provides an additional check against overestimation. Aside from the intention to deliberately skew the distribution, however, these intervals were selected on the basis of symmetry; they have not yet been verified empirically as providing an optimum level of differentiation.

In the Procedural Manual for Pre-Assessment (Special Education Supervisor Training Project, Document #12a), Step 1 consists of an examination of the performance designations circled in each Critical Competency data matrix on the Stage I work sheet to determine which Critical Competencies can be assigned competence levels immediately on the basis or the pattern of agreement among the performance designations for the CCPI, MCAI, and CKEI. For each matrix on the work sheet, whenever the three designations are all "high", an "H" is entered for competence level (C-Level) in the space provided at the top of each matrix. Similarly, whenever all three designations are "low", an "L" is entered for competence level.

When all of the twenty-four data matrices have been examined, the assessee is instructed to proceed, in turn, to steps 2, 3, & 4 to derive the adjusted performance estimates. In each of these steps respectively, a contingency table is included which provides the number for the C-K, M-K, or E-K value, and space is provided in each data matrix on the Stage I work sheet for recording these adjusted performance estimates (see Figure 5).

At the conclusion of Step 4, C-K, M-K, and E-K values will have been derived for each Critical Competency for which a competence level was not obtained in Step 1. In Step 5 these three values are summed for each Critical Competency in question and the conversion rule in Figure 4 is used to translate the sums into competence levels. When all of the twenty-four

Critical Competencies have competence levels recorded, Stage I in the pre-assessment competency analysis is complete and the assessees are instructed to move on to Stage II forthwith.

The Stage I work sheets for all three assessment phases contain twenty-four data matrices, one for each Critical Competency (see Figure 5). Before proceeding through the sequence of steps involved in obtaining the competence levels, the assessee must transpose the performance data to the "Stage I Work Sheet for Estimating Competence Levels" by circling the appropriate letter designation in each column corresponding to the performance designations circled on each of the assessment instrument score sheets. Note that the matrices for in-progress and post-assessment provide space (columns 2, 3, 4) for recording the performance designations obtained from three CCPI assessors. After all of the performance designations have been transposed from the instrument score sheets to the Stage I work sheet, a sequence of four (in-progress and post-assessment) or five (pre-assessment) steps is used to obtain a competence level for each Critical Competency.

Figure 5

Illustrations of Stage I Data Matrices

Pre-Assessment

A-1: Set Instrctnl Goals

(7) Σ =( ) C-Level:( )

CCPI	MCAI	CKEI	KAT
1	2	3	4
H	H	H	H
M	M	M	M
L	L	L	L

C-K:( ) M-K:( ) E-K:( )

In-Progress and Post-Assessment

A-1: Set Instrctnl Goals

(7) C-Level:( )

KAT	CCPI			CKEI	MCAI
	KnA	Slf	SkA		
(1)	(2)	(3)	(4)	(5)	(6)
H	H	H	H	H	H
M	M	M	M	M	M
L	L	L	L	L	L

K-Level:( ) S-Level:( )

In-progress and post-assessment of competence levels. The procedure for obtaining competence levels at in-progress and post-assessment is basically similar to the one used in pre-assessment. As was the case at the initial assessment phase, a series of sequential steps are followed which begin with an initial assignment of competence levels based on the presence of unanimity among scores. Where agreement is not present in the performance estimates, adjusted scores are derived and recombined to obtain the competence levels.

In Step 1 at pre-assessment, competence levels were assigned when the performance designations were in agreement on the CCPI, MCAI and CKEI. In Step 1 at in-progress and post-assessment, unanimity among assessors on one instrument, the CCPI, is the basis for assigning competence levels. In these instances the purposes of the first step is, again, to place each of the twenty-four Critical Competencies into one of two preliminary categories: (a) performance level adequately determined; (b) performance level not adequately determined.

Figure 6 illustrates that there are in this case again ten possible patterns of agreement, this time resulting from comparisions of the performance designations on the CCPI obtained from the three assessors; and again only two of the ten are regarded as sufficiently unambiguous to permit a Critical Competency to be assigned a competence level in this preliminary classification. Those two patterns are pattern 1 in which the three assessors are unanimous in estimating the assessee's performance to be "high"; and pattern 2 in which the three assessors unanimously agree that the assessee's performance is "low." The rationale for these decisions is essentially similar to that given previously in describing the pre-assessment procedure.

After competence levels have been assigned for competencies falling in patterns 1 and 2, Steps 2 and 3 are used for determining competence levels for those falling in patterns 3-10; and again, the issue involved is the validity of the CCPI assessor estimates.

Figure 6

Ten Possible Patterns of Agreement
Among Performance Designations
Provided Three Assessors Using the CCPI

Agreement Pattern	No. of CCPI Assessors who estimate the assessee's performance to be:			Overall Competence Level
	High	Medium	Low	
1	3	0	0	High
2	0	0	3	Low
3	0	3	0	Indeterminant
4	2	1	0	Indeterminant
5	2	0	1	Indeterminant
6	1	2	0	Indeterminant
7	1	0	2	Indeterminant
8	0	2	1	Indeterminant
9	0	1	2	Indeterminant
10	1	1	1	Indeterminant

In the present situation it is reasonable to assume that the estimates of the knowledge assessor and the skills assessor, having been based upon different sorts of observations of the trainee, do indeed reflect different performance factors. In fact, there would seem to be a natural dichotomy of performance in this situation into two factors that might be called "knowledge" and "skills" components. The estimate of the knowledge assessor would be expected to reflect the trainee's cognitive knowledge to a greater degree than his on-the-job performance skills, whereas the estimate of the skills assessor would reasonably be expected to be heavily weighted toward on-the-job performance skills rather than academic knowledge. The trainee's self-estimate, however, would be expected in most cases to be more evenly balanced between the two factors.

A logical extension of this argument is that if all three assessors agree that a performance level is "high," then the trainee's self-estimate tends to validate the other two estimates, and vice versa. The same is true when all estimates are "low." However, when the other two assessor estimates differ from each other or from the self-estimate, or when the estimates are all "medium," then the validity of each is called into question. Thus, Critical Competencies for which the CCPI agreement pattern is one of the last eight patterns in Figure 6 require further examination before they can be adequately evaluated.

The method of clarification is contained in two parallel steps and is based on the assumption that the Critical Competency in question can be

meaningfully conceived as comprising two related, but not perfectly correlated factors: "knowledge" and "skills." For each Critical Competency for which a competence level was not obtained in Step 1, Step 2 yields an estimate of the assessee's performance level with respect to the "knowledge" factor. A similar procedure in Step 3 provides an estimate of the assessee's "skill" level. After these two new estimates are derived, they will be recombined in such a way as to produce a single competence level for each of the Critical Competencies involved.

Step 2: Determination of Knowledge Levels. The procedure for determining knowledge levels involves examining the validity of the knowledge assessor's CCPI performance estimates by comparing them with the assessee's cognitive performance estimates that are obtained from the KAT. As before, the performance designations (H,M,L) are used for the comparisons.

The comparison system can be most easily shown by reference to Figure 7.

The rows of the matrix in Figure 7 correspond respectively to the performance designations, "high," "medium," and "low," produced by the assessee using the KAT. Similarly, the columns of the matrix correspond to the performance estimates produced by the knowledge assessor using the CCPI. The nine cells in the matrix represent the nine possible outcomes obtainable by comparing the CCPI and KAT performance designations.

The cell designations in Figure 7 express a rule for collapsing the nine outcomes into three performance categories. It is a conservative rule in the sense that the mixed outcomes pairs, H-M, M-H, M-L, and L-M, are assigned to the lower knowledge level specified in the pair. For example, if the assessee's knowledge level on a certain Critical Competency receives a "high" estimate on the CCPI and a "medium" estimate on the KAT, the derived estimate of knowledge level is "medium" rather than "high." Note

also that the two mixed outcomes H-L and L-H are assigned to the "medium" category since the evidence equally favors both.

In the user's manual (Document #12b), the assessee performs these comparisons on the Stage I work sheet concentrating only on those Critical Competencies for which a competence level was not determined in Step 1. A table is provided in the manual to enable the user to determine the appropriate knowledge levels. When Step 2 is completed, a knowledge level (K-Level) designation will be entered for each of the Critical Competencies in question in the appropriate spaces on the work sheet. (See Figure 5.)

Step 3: Determination of Skill Levels. The procedure for determining skill levels exactly parallels the Step 2 procedures. In this instance, however, the validity of the skills assessors's CCPI estimates are examined by comparing them with an assessee self-estimate that is assumed to reflect primarily the assessee's "skills" (as opposed to his "knowledge"). These self-estimates are obtained from the CKEI, which was also administered during data collection, and, as before, only the performance designations are used for the comparisons. Again, the nine outcomes are collapsed into three performance categories using a rule similar to the one presented in Figure 7, and the designation is recorded on the Stage I work sheet as the skill level (S-Level). When Step 3 is completed, each Critical Competency for which a competence level was not determined in Step 1 will have both a knowledge level designation and a skill level designation assigned to it.

Step 4: Determination of Remaining Competence Levels. The purpose of Step 4 is to combine the knowledge level and skill level designations to

Figure 7

Adjusted Performance Estimates
For Knowledge Factor

KAT Performance Designation	CCPI Performance Designations Knowledge Assessor: H	M	L
H	H	M	M
M	M	M	L
L	M	L	L

Figure 8

Competence Levels Determined from
Combined Knowledge and Skill Levels

Skill Level (S-Level)	Knowledge Level (K-Level): H	M	L
H	H	MH	M
M	MH	M	ML
L	M	ML	L

obtain a competence level for the remaining Critical Competencies. Since there are three possible designations for each factor--H, M, or L--another nine cell matrix, shown in Figure 8, can be used to illustrate the combining procedure.

In the matrix in Figure 8, the rows correspond to the knowledge level designations produced in Step 3. As was the case in Figure 7, the nine cells in the matrix represent the nine possible outcomes of the comparison process, and another decision rule is used to generate the competence levels. The decision rule contained in the cells of the matrix differs from that used in Steps 2 & 3 and is illustrated by the letter designations in each of the matrix cells in Figure 8. As can be seen in Figure 8, the Step 4 comparisons result in five possible competence level designations H, MH, M, ML, and L. In this instance, the 3 x 3 matrix is divided logically into five groups along a diagonal dimension. The use of a five level collapsing rule (as opposed to the three level collapse in Steps 2 & 3) guarantees the highest level of differentiation feasible from the standpoint of manageability and logic. In this case, the M-H and H-M pairs and the L-M and M-L pairs are each grouped together reflecting the fact that equal weights are assigned to the knowledge and skill level factors. That is, because the knowledge and skill factors are defined logically rather than empirically, and in the absence of contra-indicating empirical evidence, these factors are assumed to contribute equally to the overall competence level. This assumption also makes it possible to assign both the H-L and L-H pairs to the medium (M) competence level category using an averaging procedure.

Note also, that the competence levels thus obtained can be scaled ordinally. This assumption is crucial to the system and is justifiable in terms of current scaling theory given the procedures used to collect the data.

For example, it can be concluded the the competence level, H, occupies a scale position higher than any of the other five competence level designations. It is not necessary to draw conclusions regarding how much higher, or to make any statements regarding the individual's competence in relation to an external norm or criterion. Moreover, the assumption of ordinal scaling also means that the competence levels for each Critical Competency for any one individual are comparable. The designation, H, for example, indicates a higher level of competence for a given Critical Competency than a designation of MH on another Critical Competency. On the other hand, the competence level, H, obtained by a given individual on two different competencies does not necessarily mean that the assessee's competence is as high on one as on the other; it means that both are performed at a higher level of competence than competencies for which any of the other four (MH, M, ML, L) competence level designations were obtained.

When a competence level has been derived for each of the Critical Competencies in the "indeterminant" category, Stage I in the in-progress and post-assessment competency analysis is complete. At this point, the assessee will have a competence level (C-Level) assigned to each of the twenty-four Critical Competencies and these will be entered on the Stage I work sheet as C-Level values.

Stage II - Determining Critical Competency Priorities

The second stage in the Diagnostic Assessment System is concerned with establishing a limited set of six Critical Competencies that will be emphasized when planning training activities. The process for determining these priorities involves an analysis of three variables regarded as essential to this kind of decision: (a) the assessee's current level of proficiency (competency level); (b) the assessee's perceptions of the importance of each Critical Competency in relation to his or her current job requirements or career goals (personal interest level); (c) the perceptions of professional practitioners currently employed in public school settings (practitioner importance level). The competence level data were determined in Stage I and are therefore readily available to assessees. In order to obtain the personal interest level data, a simple scaling instrument, the CCIS (described earlier under the heading "Data Collection"), is used by each assessee to rank order the Critical Competencies.

To determine practitioner importance levels, a somewhat more elaborate problem is involved because a sample population must be defined and an empirical survey conducted to obtain overall averages of practitioner rankings. Ideally, the assessment system would be sufficiently flexible to leave the definition of the norm group to individual users in order to match this variable to the particular needs of a given individual or program. For example, some practicing supervisors using the system might want a practitioner norm group that would reflect competency priorities in the district or geographical region in which they are employed. On the other hand, preservice personnel who do not know where they will eventually be employed might want the norm group to reflect a more global (i.e. national or statewide) sample of practitioners. Upon reflection, however, it became apparent that no easy method could be articulated which could provide this option for individual users due to the necessity for an elaborate series of surveys. Instead, the possibility of substituting

other norms in place of the ones provided by the SEST Project is suggested to program administrators and training advisors. (See Appendix C)

Determining weights to assign each of the three variables was the basic problem confronting the designers of the assessment system in Stage II. One proposed solution, which was eventually rejected, involved assigning equal weights to each variable such that competence, interest and importance contributed equally to the priority rank ultimately assigned to each Critical Competency. This proposal involved ranking the Critical Competencies from 1 to 24 on each measure and using the rank position as the numerical weight. The three weights would have then been combined additively to obtain a total wieght for each competency. The relation between competence and priority would have been handled by inverting the weights assigned to the competence level variable in relation to the other two variables. For example, Critical Competencies having a "low" (L) competence level would have been regarded as a higher priority than competencies assigned any of the other four competence levels. In this fashion, competence levels would be inversely related to the importance that current proficiency would have in determinign the priorities. Interpretively, the totals for the three variables would have ranged from 3 to 72 with those designated as "high" priority reflecting a composite of the three variables -- competencies of greatest importance to practitioners, greatest interest to the individual assessee, and lowest current performance level.

Unfortunately, in practice this procedure did not work well due to difficulties in interpreting the meaning of the distributions obtained. Since each measure was to be weighted equally, two of the variables could be at about the same level and exercise a regressive effect with respect to a discrepant third variable. This effect was, in fact, deliberate and justifiable logically; but it produced confusion for decision makers who found that they simply could not interpret this composit number meaningfully and who, therefore,

showed a distinct tendency to ignore the composite rating and, instead, to simply assign their own intuitive weights to the three measures when making selections for further analysis. In essence, this seemingly straightforward procedure defeated both aimes of the system by: (a) forcing the decision maker to abide by the composite rating entirely, thus eliminating the option of exercising personal judgments in the selection of instructional targets; or (b) forcing some decision makers to disregard the composite procedure altogether in favor of completely intuitive judgments which could not be accountable to consistent explanation.

The intent of the procedure ultimately selected to determine priority Critical Competencies is to provide a systematic framework for manipulating data which will at the same time enable the assessee to project his or her own judgments and preferences into the system. To this end, decision points are carefully delineated and are structured in such a way that the decisions made are based upon an orderly use of the available data.

The final version of Stage II consists of three basic tasks designed to utilize the three selection variables noted above to arrive at a final set of six high priority Critical Competencies ranked in order of their importance to the assessee in planning training activities.

The identification of a preliminary set of at least 12 Critical Competencies is the first operation. The number 12 is arbitrary but assures that at least half of the original 24 Critical Competencies will be retained for further consideration as instructional targets. This initial set is preliminary in the sense that ultimately a final set of only 6 Critical Competencies will be selected for emphasis in the training program.

The selection of Critical Competencies to be included in this preliminary set is based initially upon the competence levels determined in Stage I. A

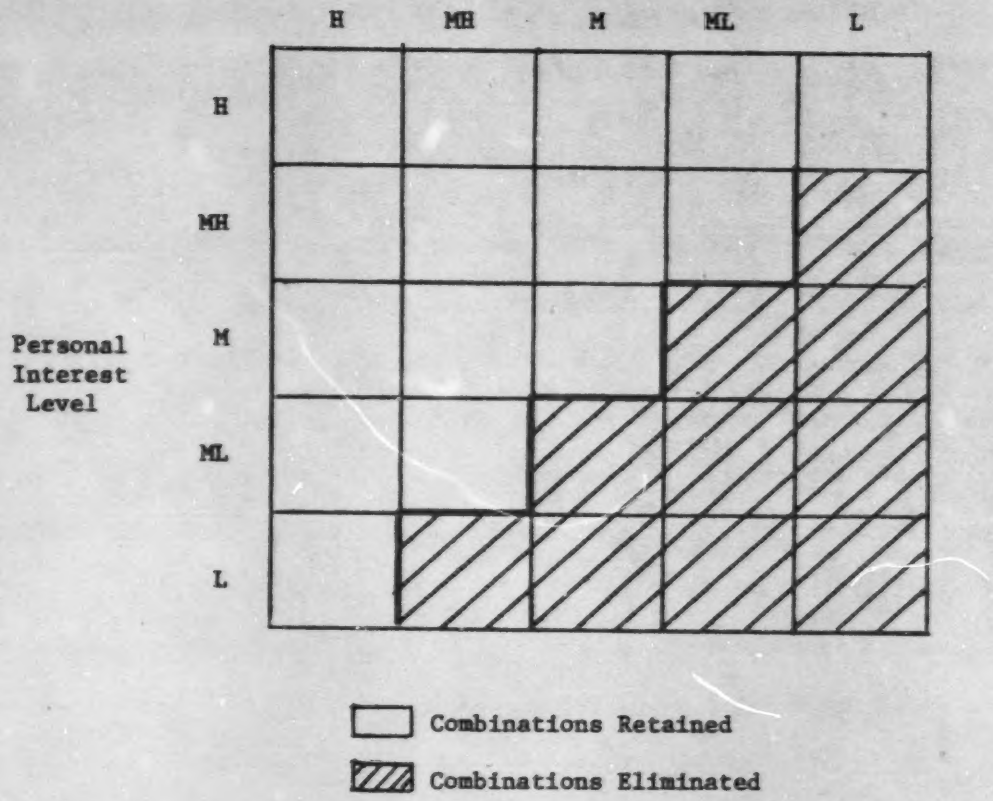
rule is provided for this purpose which specifies that all Critical Competencies with a "low" (L) or "medium-low" (ML) competence level must be included in the preliminary set. In the event that the number of competencies with either of these two designations for competence level exceeds 12, all are included in the set. In the event that there are fewer than 12 Critical Competencies with "low" or "medium-low" competence levels, additional competencies are added to the set until exactly 12 have been designated for inclusion. The selection of additional competencies is left entirely to the assessee without reference to the competence level or any other formally specified criteria, i.e. competencies added to the preliminary set may have competence levels of M, MH, or H. The purpose of the preliminary set is to assure that all competencies with "low" or "medium-low" competence levels are considered for inclusion in the final set.

The process of determining high priority Critical Competencies involves an examination of the relationship between the competence level, personal interest level and practitioner importance level data for each Critical Competency in the preliminary set. The purpose of this procedure is to eliminate certain Critical Competencies of lower importance to the assessee and to professional practitioners. Figure 9 illustrates the rule used to determine which competencies are eliminated.

It will be noted that the matrix contains 25 cells representing all possible combinations of the practitioner importance and personal interest level ranks. It is the position of the SEST Project staff that the cells obscured by the diagonal lines reflect combinations of interest and importance which are of least importance in determining priorities. To illustrate the logic of the rule, consider the case where the interest level variable is low and the importance level is low. The argument for eliminating this configuration may be stated as follows: Since the Critical Competency is of lowest importance to practitioners in the field and since the assessee expresses little interest in the competency, it is

Figure 9

Illustration of a Rule for
Eliminating Critical Competencies



of a generally low priority. An assessee whose competence level is medium, medium-high, or high is probably already adequately competent (in relation to his competence on the other competencies). Conversely, a low or medium-low competence level in the absence of higher importance and interest levels does not indicate a high enough level of need to warrant assigning a high priority to the Critical Competency in question. Referring again to Figure 9, it can been seen that in order for a Critical Competency to be included for consideration in the final set, the sum of the two variables, when combined using an averaging procedure, must amount to at least a medium level of need (e.g. the combinations H & L and MH & ML are retained); the combinations MH & L and M & ML are eliminated. Here again, the rule adopted is arbitrary; its selection is based upon a logical analysis rather than empirical procedures. The rule assures that only competencies with a moderately high level of both interest and importance will be included in the final set of high priority competencies.

This two step procedure used to construct the preliminary set guarantees first that all Critical Competencies with "low" or "medium-low" competence levels will be further examined in terms of personal interests and practitioner importance. Second, it guarantees that only those competencies regarded as moderately interesting and important will be included in the final set.

The final operation in Stage II involves ranking the remaining Critical Competencies in the preliminary set in descending order of importance. These decisions are made by the assessee alone relying upon his or her own judgment of importance or need represented by the competencies in question. (Later, in Stage III, these decisions will be reviewed by the assessee and a training advisor together so that these priority ranks are not irrevocable.)

When these rankings are completed, the Critical Competencies ranked one through six (i.e. the six competencies ranked highest) are designated as the final set. Only these six competencies in the final set will be considered in the process of planning training activities which occurs in the next stage of the competency analysis. In Stage III it will become obvious that this ranking procedure in reality serves only to designate the highest six Critical Competencies. The actual rank position of these six is not regarded as crucial as many additional factors also contribute to the scheduling and prioritizing of training activities. Moreover, this method of designating the final set (i.e. ranking all competencies remaining in the preliminary set) may seem somewhat overelaborate. Experience with the system, however, has indicated that the ranking procedure promotes a more careful consideration of the individual competencies than a simpler alternative such as instructing the assessee to simply designate only six.

In the procedural manuals (Documents #12a and #12b) Stage II actually involves seven discrete steps that must be completed by the assessee. Step 1 contains instructions to begin construction of the preliminary set by designating those Critical Competencies with "low" or "medium-low" competence levels on a Stage II work sheet containing twenty-four data matrices, one for each Critical Competency. Each data matrix on the work sheet contains space for recording the competence level, personal interest level, and practitioner importance level data. The "low" and "medium-low" competencies are designated by circling the appropriate competence level in the first column of the data matrix corresponding to the Critical Competencies in question (see Figure 10).

The second step instructs the assessee to select additional competencies to add to the preliminary set if, and only if, there are fewer than 12 competencies with "low" or "medium-low" competence levels. This procedure assures

that at least half of the Critical Competencies will be considered for inclusion in the final set. Steps 3 & 4 instruct the assessee to record the personal interest level (from the CCIS) and the practitioner importance level (either the norms provided in Appendix G or norms provided by the program director or training advisor. In the event that norms other than those provided by the SEST Project are to be used, it is recommended that these be described in a table and inserted in place of the one in Appendix G. This will provide continuity in the manuals' narratives and instructions). Step 5 contains the elimination procedure illustrated in Figure 9. Assessees are instructed to place a check mark in the box provided at the top of the data matrix (see Figure 10) if the competency is to be retained. Step 6 is a recycling procedure which is intended to assure that at least six competencies will be included in the final set and it is used only in the event that there are fewer than six competencies remaining in the preliminary set after the application of the elimination rule in Step 5. Thus, at the completion of Step 6 at least six competencies will remain in the preliminary set. If the Stage II instructions are completed correctly it is impossible to have fewer than six competencies at the conclusion of Step 6.

Step 7 is the final step in Stage II. It contains instructions for ranking the Critical Competencies remaining in the preliminary set. These competencies are, at this point, identifiable by the check mark recorded in the box at the top of the matrices on the Stage II work sheet. The numerical ranks are recorded in the space provided labeled "P-Rank". The Critical Competencies with P-Ranks from 1 to 6 are regarded as the final set of high priority Critical Competencies. These six are retained for use in Stage III, and all other competencies are elminated from further consideration during this assessment phase.

Figure 10

Illustration of Stage II Data Matrix
Determining Critical Competency Priorities

Competency Number and Title

P-Rank:( )

C-Level	Int-Level	Imp-Level
H	H	H
MH	MH	MH
M	M	M
ML	ML	ML
L	L	L

Stage III Diagnosis

Up to this point in the competency analysis, the focus of attention has been on the Critical Competencies which, it will be recalled from previous discussion are statements of complex performances that can be logically analyzed into a variety of less complex performances termed Major Competencies. At the conclusion of Stage II six of the Critical Competencies from among the original array of twenty-four will have been chosen for emphasis in training program plans. It is important to realize, however, that these six Critical Competencies are comprised of a very large number of Major Competencies, some of which an assessee may already be quite capable of performing. For this reason, and to simplify the process of selecting training activities, the next step in the analysis is to re-analyze certain portions of the data in order to pinpoint specific knowledge or skill deficiencies needing development.

Specifying competency needs and deficiencies. The diagnostic procedure that constitutes the first part of this stage consists of a component analysis of each of the six high priority Critical Competencies with attention focused on the Major Competencies that comprise them. This analysis involves comparisons of the Major Competency performance scores from the Knowledge Assessment Test (KAT) and the Major Competency Assessment Inventory (MCAI) in order to identify specific areas of knowledge or skill deficiency within each of the six high priority Critical Competencies. The performance designation for the Major Competencies are given as either "high" (H) or "low" (L), and comparing the scores from the two instruments can therefore result in one of four possible configurations for each Major Competency. A diagnostic interpretation is assigned to each of the four configurations by making the assumption that Major Competencies can also be meaningfully conceived as consisting of two related factors; "knowledge" and "skills." In this case, the KAT scores are used

as the "knowledge" factor and the MCAI scores are designated as the "skills" factor. With respect to the plausibility of assuming the existence of these factors, several points should be underscored. First, it is perfectly logical that the test of cognitive understanding, the KAT, be used as an indicator of knowledge. The only vulnerability of this proposal lies in the number of items associated with each Major Competency. (Three test items are associated with each Major Competency, an admittedly low number which was settled upon for practical reasons related to the time required to administer and score the test.) On the other hand, the attribution of a skill factor interpretation to the MCAI performance involves more risk from the standpoint of logic, but a risk felt to be acceptable given the purpose of the procedure. In other words, neither of these interpretations are binding on decision-makers who presumably will have a fair understanding of the limitations inherent in the procedure and will use the data only to point them in the direction of probable skill deficiencies. The purpose, reiterated, is to provide decision-makers with rather simple guideposts which will direct their attention to certain Major Competencies for which the assessee's competence is probably weak or questionable.

The diagnostic interpretations assigned each of the four possible configurations of the MCAI and KAT comparisons are simple inferences regarding the assessee's performance deficiencies and are illustrated in Figure 11.

Figure 11

Illustration of Diagnostic Interpretation Obtained Comparing Performance Designations from the KAT and MCAI

Agreement Pattern	Major Competency Performance Designations		Diagnosed Deficiency Area
	MCAI	KAT	
A	H	H	None Indicated
B	L	H	Skill Deficiency
C	H	L	Knowledge Deficiency
D	L	L	Both Skill & Knowledge Deficiencies

At first glance, these interpretations seem fairly straight forward and logically intuitive. A note of caution must, however, be added here with respect to agreement pattern A where both performance designations are high. Here again, as was the case in the interpretation of competence levels in Stage I, the interpretation of the high, high pattern will vary somewhat depending upon the manner in which the MCAI is administered. Where forced-choice guidelines were used this pattern must be interpreted in relative rather than absolute terms. It will be remembered that this is the case only during the in-progress assessment phase.

The reader will also recall that the MCAI is completed only by the assessee as a self-report procedure regardless of assessment phase even though the guidelines at pre- and post-assessment call for absolute performance estimates. This means that pattern A in Figure 11 must be interpreted with caution. However, to increase the estimate's viability a correction factor has been introduced into the procedure for determining Major Competency performance designations

from the MCAI. Of the six response catagories available to an assessor on the instrument, only the two highest estimation catagories are assigned the performan designations high ("H"); the remaining four response catagories are designated as reflecting a low ("L") level of performance. This deliberate skew is intended to partially correct for tendencies of self-assessors to over-estimate their competence levels.

In the procedural manuals for Stage III the diagnostic procedures are detailed in four very simple steps, two of which are concerned only with preparing the Stage III work sheet. A note on record keeping is in order at this point in order to understand the sequence of operations for Stage III. The Stage I and Stage II work sheets have been designed as organizers to assist the data analysis process. By contrast, the purpose of the Stage III work sheet is three fold: (1) to provide a convenient place for summarizing the relevant information regarding the Six Critical Competencies assigned the highest priority ranks (1 through 6) in Stage II; (2) to format the Major Competency performance data to facilitate the diagnostic procedures; (3) to provide a permanent record of planned training activities aimes at serving the diagnostic needs.

In order to meet each of these criteria, the Stage III work sheet had to be designed in such a way that it would contain all of the relevant information derived during the first two stages of the competency analysis for each of the six high priority Critical Competencies. In addition, space had to be provided for recording performance data specific to each of the associated Major Competencies. For this reason, there are actually six Stage III work sheets contained in the workbook for each assessment phase, one for each high priority Critical Competency. Of necessity, the work sheets are somewhat cramped and users may want to add additional sheets, especially when recording planned training activities.

Another aspect of the work sheet deserves comment here as well. At the beginning of Stage III, before the diagnostic procedures are begun, assessee's are instructed to record the full statements of each of the high priority Critical and associated Major Competencies on the work sheets. This is a somewhat laborious task but one which has proven valuable in practice for several reasons. First, writing out the competencies assures that the assessees will have read and reviewed their priorities in some detail. Up to this point in the analysis the competencies have been designated by number only. Another reason is that with the full competency statement recorded on the planning sheet, confusion and misunderstandings between the assessee and the training advisors are minimized.

For the reasons outlined above, the first two steps in the procedural manuals involve recording competency statements and transferring summary data to the Stage III work sheets. The next two steps (3 & 4) contain instructions for transposing the Major Competency performance designations to the appropriate work sheets. The fifth and last step in the diagnostic sequence presents a decision rule for indicating the area of performance deficiency or competency need for each major competency.

Planning training activities. The second part of Stage III details suggestions for planning training activities. This is conceived as a joint decision making exercise involving the assessee and one or more cooperating planners who will serve as training advisors. This person(s) must be designated before this stage of the analysis can proceed. In most training programs the planning process often takes place in a highly idiosyncratic manner depending upon the skills and interest of a given advisor. It is hoped that the suggestions offered here will result in an orderly discussion based upon a careful examination of the available data that will result in the selection of certain Major and Critical Competencies as training targets.

It should be kept in mind, however, that these data are intended only as guides; the basic premise of the competency-guided training model is that these decisions involve the weighing and balancing of too many complex factors to allow the data alone to dictate exact training experiences or sequences of experiences. (Examples of such factors might include: the availability of certain resources, the assessee's other time commitments, specific credentialing or degree requirements, etc.) Instead, the assessment system is designed to assure that relevant information is at hand in a form which will facilitate the process of deciding upon or prescribing training experiences. An over-reliance on the data is in this case, as damaging as ignoring it altogether.

The suggested procedures contained in the second part of Stage III incorporate rather basic decision making processes. First, assessees are instructed to meet with their cooperating planners, review the data along with any other appropriate considerations, and to decide on particular Critical and Major Competencies to emphasize. Next, these two individuals scan the available instructional resources and select out one or more activities which will provide relevant learning opportunities. Finally, the agreed upon activities should be recorded on the appropriate Stage III work sheet along with a target date for completion of the activity. The completed Stage III work sheets can serve as an educational plan providing both the trainee and the advisor with a permanent record of the agreed upon program of training. These suggestions will, of course, vary in the extent to which they are appropriate for a given institution or setting and should be modified or adopted as needed.

IV. USING ASSESSMENT OUTCOMES

This entire assessment system is essentially diagnostic, but not prescriptive. The assessee dominates the whole assessment process. This is both unavoidable and highly desirable, given the underlying assumptions on which the system is based. The assessee's control of the process imposes limitations upon the uses to which the outcomes can be put, however. Similarly, the absence of any direct measures of the performance patterns specified in competency statements, further imposes limitations on the confidence with which the outcomes can be treated. These cautions and limitations notwithstanding, this assessment system, vigorously applied by appropriate individuals, can be useful in each of several ways:

(1) The assessee can gain skill in using data from various sources in more systematic ways.

(2) The assessee can be guided by the system to prioritize estimated competency needs in a logical, rational way.

(3) The assessee can be guided to "cross-examine" self-perceptions of competence.

(4) The assessee can be guided by the system to be selective in planning for further professional development.

(5) The assessee can be assisted in accepting responsibility for continuous professional development.

(6) The assessee can compare his/her competence levels with expectations of job situations.

Skill in Systematic Analysis of Data

Assessees sometimes fail to appreciate the rigor and the logic of this assessment system. It is fairly easy to find "shortcuts" and omit certain

steps in the assessment process. Often such modifications in procedures will make no difference in the final outcomes, but very often serious defects are produced. The rigor of the system depends not only on the generation of the most objective data available, but also upon the detailed, step-by-step analysis process. Every step should be followed by the assessee even if it seems laborious at times. Field testing has demonstrated that wasteful steps have already been eliminated. Every step really is essential!

As the assessee proceeds through the data analysis procedures the logic of the system becomes increasingly clear. Gradually the assessee gains an appreciation for the rationality of the final outcomes. He/she discovers that the systematic and logical manipulation of different kinds of data really can lead to useful decisions.

While workbooks and procedural manuals used for data analysis have been designed for self-assessment with only limited supervision, assessees seem to gain from opportunities for discussions about the processes of analysis and the findings. Following each stage in the analysis process, a group of assessees will often find such a discussion rewarding.

Rational Prioritizing

The outcome at the end of Stage II is a set of priorities assigned to selected competencies. If assessees follow procedures carefully, they find themselves gaining considerable confidence in the priorities assigned. Not only do they accept them as meaningful priorities, but they tend to be reassured by the fact that only a limited number of the total array are to be utilized in the diagnosis process in Stage III.

With a limited amount of discussion, assessees can readily gain an appreciation for the use of both performance estimates and other more value-laden data in arriving at final priority decisions. This fosters respect for objectivity in the assessment process without denying the importance of affectivity as well.

Cross-Examining Self-Perceptions

Self-perceptions of oneself as a many faceted professional person are rarely sharply defined or verifiable, free from distortions. Nonetheless, the mature individual inevitably knows a great deal about himself; perhaps, more than any other individual or group. This competency assessment system attempts to design for maximum use of self-knowledge present in assessees while guarding against the naive overreliance on self-report information. When only self-report data is available, logical consistencies and inconsistencies between types of data are systematically analyzed. When data is provided from other assessors, similar consistency analysis is still demanded by the system. In this way, the system demands that the conscientious assessee cross-examine his or her own self-report data.

As the assessee thoughtfully proceeds through the assessment system, new perceptions of self are almost certain to emerge. Uncertainties are resolved in many instances. Vague notions about what competence means in a given task area become more clearly defined. As the assessment process is repeated for in-progress and post-assessment, the assessee can develop rather dramatically restructured self-perceptions of professional competence. For most this will produce a new sense of pride and confidence as well as greater humility.

Selecting and Planning

Planning and implementing a professional growth process that will produce significant improvements in competence is no easy task. By defining competencies as rather complex patterns of task-related behavior, the assessee is challenged to plan for the development of new competence in more realistic ways. Such planning demands a highly selective process. It does not seem practical to provide for competence development of these complex kinds, without selecting certain competencies and ignoring others. This competency assessment system guides the assessee to select only six out of twenty-four critical competencies for diagnosis and planning. These selected competencies when carefully analyzed according to procedures in Stage III can provide the focus for planning and implementing a training plan that is both individualized and realistic.

In helping assessees to make full use of the procedures in Stage III it is important to emphasize planning of training activities. Once the diagnosis is complete, several sources are utilized in selecting training activities related to instructional supervision. The Competency-Keyed Experience Inventory (CKEI) provides an extensive list of activities that should be studied and used in selecting future experiences. The Directory (Document #9) lists training materials that can be secured as needed. Similarly, an array of competency-keyed training materials produced by the SEST Project can be considered for use in a training program. (See Appendix A).

Continuing Competency Development

Competency development is a lifelong process! The hallmark of both the professions and the arts is a continuous commitment to excellence. This assessment system has been designed to facilitate planning for professional growth in competence in supervisory leadership. Each of the

three phases should be viewed as another stimulus to this continuous process of competency development.

As assessees are being assisted in making rather specific commitments to selected training activities, target dates should be set. A realistic time-frame should be adopted to assure continuity of activities without an overload. On the other hand, each training plan prepared on a Stage III work sheet needs to be part of a larger, overall plan of professional development. Even so, when it seems appropriate, a new round of competency assessment should be undertaken and plans revised as indicated by new diagnoses. This system provides for only three such "rounds" of competency assessment -- Pre-Assessment, In-Progress Assessment, and Post-Assessment. This should not be construed as the limits of the system since in-progress and/or post-assessments can be repeated as needed.

Comparing with Job Situations

The diagnostic competency assessment system can be utilized cautiously for comparing competence estimates with job expectations. This involves considering both strengths and limitations as assessed. The post-assessment procedures are most useful for this purpose. If job expectations can be described as an array of competencies, it is relatively easy to compare competence levels on the Stage I work sheet with competency expectations of the job under consideration. The data provided by the Critical Competency Interest Scale (CCIS) is also useful in making these comparisons.

Since competency assessment procedures have been developed and tested as a guidance system, its use in comparing jobs and individual job holders must be undertaken with great caution. An assessee can compare his/her own assessment data with competency specifications for a job to assist in determining interest in seeking such a position with profit. An assessee

staff group can analyze their various job/competency relationships to consider redefinition of assignments or needs for additions to the staff without concern. However, it might be very unwise for assessees, placement officers, or employers to use competence levels as major selection criteria. To date there is too little information regarding the reliability and validity of these data to warrant their use for summative evaluation purposes, except with a great deal of caution regarding the meaning of the scores. In any case, many other evaluative criteria would also need to be employed in addition to those provided by this competency assessment system.

V. ADMINISTERING COMPETENCY ASSESSMENT

An individual or small committee needs to assume responsibility for coordinating competency assessment any time more than a few individuals are involved. If the assessment system is being used in a pre-service training program for administrators and supervisors of instruction, a faculty member needs to be designated as the administrator or coordinator. If the assessment system is being used in a school system with staff members interested in improving their supervisory competencies on-the-job, then an individual or committee needs to be designated.

Plans and procedures will vary somewhat depending upon the situation involved. Generally, however, the system can be administered with a minimum of structure. An orientation session needs to be offered to all officials working directly with assessees. A more rigorous orientation needs to be offered to assessees themselves. (See Appendix E.) Plans need to be outlined for the complete sequence of assessment activities from pre-assessment through post-assessment. A schedule needs to be developed and approved to assure time and commitment to data gathering, data analysis, and training activity planning.

Pre-Service Training Programs

Pre-assessment of competencies is usually best scheduled in the early days or weeks after arrival on campus for formal course work. Pre-assessment is not intended for use in selecting candidates for admission to a program of training. Such selection would necessarily involve quite different measures of academic aptitude, academic performance, critical thinking ability, success in teaching, and human relationships. None of these are measured by the Diagnostic Competency Assessment System.

In Figure 12 a proposed schedule for competency assessment and follow-up activities is shown. This proposal assumes a program extending over an academic year with essentially full-time students. When a training program involves a series of summer terms with limited involvement during the "regular" academic year, then competency assessment activities will need to be modified to fit.

The essential elements in planning for implementation of the assessment system include the following:

(1) Agreement among college faculty members (and administrators) to allocate the time, assist with planning for training, and to permit students to utilize training plans as they pursue their studies in various courses, labs, and field assignments.

(2) Careful orientation for students to be sure they understand and accept the competency assessment process as a tool for learning.

(3) Clerical assistance for reproducing and stocking assessment materials, and keeping records of individual student diagnoses.

(4) An independent study area where materials and equipment are readily available to students as they pursue diagnosed needs.

(5) A coordinator to plan the schedule and assist individual students and faculty members with questions or problems encountered.

Ideally, program restructuring of many kinds could be considered for making fullest use of competency assessment. Field experience can be designed and scheduled to match diagnosed needs of individuals and groups. Laboratory training sessions can be designed to relate to major and critical competencies; and such sessions can be offered on a flexible schedule. Independent study and peer tutoring plans can be developed to conform to competency spedifications.

Figure 12

A Long-Term Schedule for
Competency Assessment in a Collegiate Program

Days	Sessions and Events
0	Fall Registration for classes
1	Orientation Meeting on Competency Assessment System Independent Study of Document #7 and completion of instruments.
5	Competency Analysis Session - Pre-Assessment
5-12	Individual planning conferences with faculty advisors and students developing growth plans.
14	File copy of growth plan with assessment coordinator, program director, or secretary
85-90	Orientation meeting on In-Progress Assessment Independent completion of instruments (Note: Other assessors must be secured for each student)
95	Competency Assessment Session - In-Progress Assessment
95-100	Individual Planning Conferences with faculty advisors.
105	File new and/or revised growth plans
100	Independent completion of Post-Assessment instruments including competency assessment workbook.
185	Competency Interpretation Session - Discussions concerning future uses of assessment data. Feedback.

In-Service Growth Programs

Competency assessment for on-the-job supervisors and administrators can be scheduled in any fashion that fits with the character of the school calendar and the contract year of the assessees. Pre-assessment might be scheduled to good advantage during summer months if workload pressures are such to allow time for thoughtful data gathering and competency analysis. On the other hand, early fall or even the pre-holiday period might have advantages in terms of work loads and opportunities to follow-through on planned activities for growth.

Figure 13 outlines a sequence of scheduled events beginning in summer and extending over a cycle of approximately twenty-five (25) months. A shorter cycle might be employed if intensive study activities can be scheduled between pre-, in-progress, and post-assessment phases.

The schedule of activities shown in this in-service training situation calls for a pre-orientation meeting to provide supervisors and administrators with basic information about the Diagnostic Competency Assessment System. It is suggested that participation be voluntary rather than required, to assure the best acceptance and follow-up on assessments by each individual assessee.

In addition to routine assessment procedures similar to those suggested previously, the plans for the use of assessment information might well include the following:

(1) The preparation of Professional Growth Plans that are a bit more carefully developed than those produced at the end of Stage III.

Figure 13

Schedules for Competency Assessment Activities
in In-Service Training

Summer	Pre-Orientation Meeting - Administrative and Supervisory staff groups brought together to become aware of system.
	Volunteers indicate their desire to participate.
Late Summer	Document #7 and CCPI distributed to volunteers
Early September	Orientation Session (See Appendix E). Procedures and plans developed. Instruments distributed. Next steps clarified. KAT administered and scored.
	Independent completion of all instruments. (Other assessors complete instruments, if appropriate)
2 weeks later	Competency Analysis Session (See Appendix F). Assessment data on various instruments reviewed. Competency analysis Stages I and II completed. Plans for III.
3 weeks later	Professional Growth Plans completed.
Fall and Winter	Sharing Sessions. Small sub-groups of administrators and supervisors come together three to five times over a period of four or five months to share ideas.
	Independent study activities proceed under the guidance of plans but initiated by individuals.
	Special Workshops or Mini Courses. Local coordinator arranges for, and schedules, one or more training sessions specifically related to diagnosed need.
	Independent Report. Submitted to local coordinator by each participant indicating progress attained.
Early Spring or Summer	Planning Session for In-Progess. A series of meetings is schedules to introduce materials, distribute instruments, and make plans for a second cycle of assessment.
	Competency-reassessment and planning completed.
Summer and Fall	Sharing Sessions, Independent Study Activities, Special Workshops or Mini Courses, and Independent Reports repeated.
Winter or Early Spring	Post-Assessment initiated following prior year sequence.
Spring or Summer	Evaluation of the entire effort
	Replanning for next steps.

(2) Special workshops or mini-courses provided in addition to independent study activities.

(3) An independent progress report submitted by each assessee indicating progress toward planned competence development.

Each of these three special features of the overall plan for competency assessment will facilitate follow-through.

There is great danger that competency assessment will be used as we often use "tests," to satisfy our curiosity, but not to guide actions. The seven or eight hours invested in gathering data and analyzing competency needs will be largely wasted (not entirely so, of course) unless clear next steps are indicated, target dates set, workshops scheduled, study materials circulated, and progress formally reported.

Formal Professional Growth Plans should take the priority needs and diagnosed deficiencies from the Stage III worksheets and build a plan of action in more detail than these worksheets permit. Such plans should indicate new experiences, special work assignments, field trips, professional meetings, readings, and consultants to be scheduled for professional growth in specific major and critical competencies. It may be advisable, of course, for assessees to come together following the preliminary drafting of individual growth plans to coordinate their schedules. If a field trip can be useful in dealing with a given competency need and that is a priority for several assessees then a trip schedule can be coordinated for all. On the other hand if several assessees need a special assignment to gain experience related to a given competence need, it may be necessary to stagger these assignments over a period of time.

The sharing and collaborating regarding individual professional growth plans should culminate in a revised, more complete, better detailed Professional Growth Plan document for each individual. A copy can be placed on file and appropriate approvals secured as needed to make it clear to all concerned that both the individual staff member and his or her superordinate are supporting the efforts at competency development.

As individual Professional Growth Plans are approved and filed, the person designated to coordinate these efforts can begin identifying needs to be served by visiting consultants, workshops, mini courses and other group training endeavors. For some competencies a graduate course might better be developed on-the-job, but the assistance of a technical consultant may be essential. Still other competencies shared in common by a small group can form the basis for a workshop or mini course series.

Independent study activities will be an essential part of any efforts to follow-through on competency assessment. A profession library will be essential, but equally important will be efforts to secure recent books, monographs, journal articles, and ERIC documents relating to specific competencies. These, then should be retained on a special shelf, labeled by competency or circulated systematically among assessees.

Non-traditional training materials are essential to independent study for growth in competence. Unfortunately, these materials -- tapes, films, games, simulations, programmed packets, etc. -- are rather expensive, and collections are not already in existance. Larger school districts can and should utilize their professional library and in-service training staff to build these collections. The Directory (Document #9) will be a useful reference in this process. Smaller school districts may have to

seek cooperative agreements with colleges, regional service centers, and county school offices to develop collections of these expensive materials that are so useful for professional competency development.

APPENDICES

APPENDIX A

PUBLICATIONS AND MATERIALS

Technical Documents

Professional Supervisory Competencies, Document #7 (Revised), Special Education Supervisor Training Project, Austin, Texas: University of Texas, 1975

A Selected Bibliography for Professional Supervisory Competencies, by Ben M. Harris and Corine Martinez, Document #8, Special Education Supervisor Training Project, Austin, Texas: University of Texas, 1975

A Directory of Competency-Guided Supervisory Training Materials for Independent Study, by Corine Martinez and Ben M. Harris, Document #9, Special Education Supervisor Training Project, Austin, Texas: University of Texas, 1975

Independent Study Training Materials for Professional Supervisory Competencies, Document #10, Special Education Supervisor Training Project, Austin, Texas: University of Texas, 1975 (see next page)

A Diagnostic Assessment System for Professional Supervisory Competencies, by Michael C. Evans, Ben M. Harris, and Richard L. Palmer, Document #11, Special Education Supervisor Training Project, Austin, Texas: University of Texas, 1975

A Manual for Pre-Assessment, by Michael C. Evans, Richard L. Palmer, and Ben M. Harris, Document #12a, Special Education Supervisor Training Project, Austin, Texas: University of Texas, 1975

A Manual for In-Progress and Post-Assessment, by Michael C. Evans, Richard L. Palmer, and Ben M. Harris, Document #12b, Special Education Supervisor Training Project, Austin, Texas: University of Texas, 1975

APPENDIX B

TWENTY-FOUR CRITICAL COMPETENCIES FOR PROFESSIONAL SUPERVISORS OF INSTRUCTION

A. Developing Curriculum

A-1 Setting Instructional Goals

A-2 Designing Instructional Units

A-3 Developing and Adapting Curricula

B. Developing Learning Resources

B-1 Evaluating and Selecting Learning Materials

B-2 Producing Learning Materials

B-3 Evaluating the Utilization of Learning Resources

C. Staffing for Instruction

C-1 Developing a Staffing Plan

C-2 Recruiting and Selecting Personnel

C-3 Assigning Personnel

D. Organizing for Instruction

D-1 Revising Existing Structures

D-2 Assimilating Programs

D-3 Monitoring New Arrangements

E. Utilizing Supporting Services

E-1 Analyzing and Securing Services

E-2 Orienting and Utilizing Specialized Personnel

E-3 Scheduling Services

E-4 Evaluating the Utilization of Services

F. Providing In-Service Education

F-1 Supervising in a Clinical Mode

F-2 Planning for Individual Growth

F-3 Designing In-Service Training Sessions

F-4 Conducting In-Service Training Sessions

F-5 Training for Leadership Roles

G. Relating to Public

G-1 Informing the Public

G-2 Involving the Public

G-3 Utilizing Public Opinion

DEVELOPING CURRICULUM

A-1 Setting Instructional Goals: Given a mandate to clarify major goals of instruction, the supervisor can lead groups of parents, citizens, specialized personnel, teachers, and pupils through a series of discussions, presentations, training sessions, and other experiences to produce a report showing some of the most important instructional goals on which there is agreement.

a. Can exhibit a variety of effective procedures for leading groups in a goal-setting session.

b. Can use graphic, analytic or illustrative techniques to clearly differentiate ideals, goals, and objectives, while showing their inter-relationships.

c. Can organize and make arrangements for participants to contribute their input and share fully in the decision-making process.

d. Can write clear statements of instructional ideals and goals that define learning outcomes at different levels of complexity.

A-2 Designing Instructional Units: The supervisor can design instructional units which specify performance objectives, instructional sequences, a variety of appropriate teaching/learning activities, materials, and evaluative procedures.

a. Can write statements of performance objectives at varying levels of complexity.

b. Can select and describe a rationale for the strategy upon which a unit is developed.

c. Can select, describe, and sequence a variety of instructional activities for assuring active involvement by all students in the learning process.

d. Can describe teaching procedures including illustrative questions, outlines of content, and specific illustrations to assure meaningful learning.

A-3 Developing and Adapting Curricula: Having secured innovative curricula developed outside the school or district, the supervisor can adapt the curricula to meet the needs of a student or student group, and make them available to local personnel for use in guiding instructional planning.

a. Can select instructional goals and objectives that have highest priority for specific pupils within the school or district, and can justify these priorities in terms of student interests, needs, and abilities.

b. Can edit and revise activity descriptions to make them more appropriate to student needs.

c. Can reorganize curriculum materials for reproduction and distribution according to student needs.

d. Can design tests, work sheets, and illustrations to supplement or substitute for materials provided.

DEVELOPING LEARNING RESOURCES

B-1 Evaluating and Selecting Learning Materials: Given expressed needs for learning materials, the supervisor can develop a set of evaluative criteria and procedures to determine the quality, utility, and availability of learning materials, and can organize and conduct review sessions where teachers and other personnel can apply the criteria to new materials and make recommendations for acquisitions in needed areas.

a. Can specify the criteria of quality, utility, and availability that will be considered in evaluating and selecting learning materials.

b. Can design an instrument for objectively assessing new learning materials on specified criteria.

c. Can train and direct instructional personnel in using materials evaluation instruments in selecting instructional material.

B-2 Producing Learning Materials: Given learning needs and a curricular design to meet those needs, the supervisor can arrange for the production of the necessary learning materials to complement, fulfill, and/or enhance the aims of the curriculum.

a. Can secure and adapt or produce learning material that stimulates active, meaningful, purposeful involvement of students in attaining specific learning.

b. Can produce written materials for use by pupils, e.g., programmed material, workbooks, etc.

c. Can operate media production equipment including sound recorders, videotape recorders, and some graphic or photographic producers.

B-3 Evaluating the Utilization of Learning Resources: Given an array of learning resources currently available for use, the supervisor can design and conduct a study to determine the extent and appropriateness of their utilization, and, based on the results of that study, can make recommendations for the improved utilization of specific learning resources in specific ways.

a. Can specify criteria to be used in evaluating resource utilization.

b. Can design instruments to objectively measure both extent and appropriateness of resource utilization.

c. Can propose recommendations for improving utilization of resources, based on the data received from an evaluation.

STAFFING FOR INSTRUCTION

C-1 Developing a Staffing Plan: Given a new project proposal which specifies budget, general objectives, and operational procedures, the supervisor can describe essential staff positions to be filled, develop job descriptions for each, and specify the competencies required of the individuals who will fill the positions.

a. Can prepare a written proposal justifying staff positions necessary to accomplish specified outcomes.

b. Can write definite job descriptions providing a full array of information which distinguishes each position, accurately informs applicants, and guides the referral process.

c. Can specify both basic and specialized competencies that are desired in a person who will fill each position described.

C-2 Recruiting and Selecting Personnel: Given a description of several staff positions to be filled, the supervisor, by engaging in a variety of selective recruitment activities, can secure a list of several possible applicants from various sources, can systematically secure and validate relevant information on the applicants by conducting personal interviews, by checking with previous employers, and by using other selection procedures, and can prepare a set of recommendations for filling the vacancies with the applicants who will best fulfill job requirements.

a. Can identify several sources of possible applicants, outline efficient procedures for locating interested individuals, and specify least useful or non-productive procedures to be avoided.

b. Can construct or adapt forms, specify sources of the most relevant information about applicants, and specify least useful or unreliable information to avoid.

c. Can conduct an effective interview with applicants to secure relevant information, avoiding time-wasting, anxiety-producing, and information-losing behaviors.

C-3 Assigning Personnel: Given the task of assigning new personnel and reassigning currently employed personnel to achieve instructional improvements, the supervisor can analyze the needs, expectations, and composition of existing staff groups in various units, and, based on that analysis, can prepare and justify recommendations for assigning and reassigning staff members to positions for optimum educational opportunity.

a. Can assess the competency needs of an existing program or district with respect to personnel assignments that would be necessary to enhance the instructional process.

b. Can identify the special competencies of staff members that could potentially lead to improvement in the instructional process.

c. Can prepare recommendations for assignments utilizing the special competencies of staff members to better fill the assessed needs.

ORGANIZING FOR INSTRUCTION

D-1 Revising Existing Structures: Having determined the strengths and weaknesses of an existing organizational structure, the supervisor can propose carefully reasoned or research supported changes, which may include the alteration of assignments, of the use of staff time, of the required reporting patterns, or of the allocation of resources to improve efficiency, productivity, and morale, and, in so doing, improve the instructional process.

a. Can prepare and utilize criteria, emphasizing operational events, to assess the strengths and weaknesses of an existing organizational structure.

b. Can detail two or more organizational charts showing alternative ways of organizing personnel to define roles and relationships.

c. Can draft a rational, research supported, and cooperatively developed proposal for an alternative structure to eliminate a weakness in a program.

D-2 Assimilating Programs: Given a successful instructional program operating within a center, school, classroom, or other unit, the supervisor can design a plan for the smooth integration of the entire program or selected components thereof into a larger system, prepare a timetable and assignments for the transferring of responsibilities, and assure that the instructional improvement evidenced in the program is continued in the system to which it is transferred.

a. Can discuss with key individuals throughout the system the advantages of assimilation in such ways as to secure understanding and acceptance of a new program plan.

b. Can design an assimilation strategy that is reasonably acceptable to all concerned and which utilizes representatives of all groups in the assimilation process.

c. Can develop a detailed plan for assimilation, depicting timetables, reassignment of personnel and retraining needs.

D-3 Monitoring New Arrangements: Given the task of implementing a new organizational arrangement, the supervisor can determine reporting procedures, compare actual operations with planned developments, and when necessary, make recommendations to modify operations to bring them into agreement with formulated plans.

a. Can redesign arrangements for reporting procedures throughout an organization which will maximize the efficiency of such reporting, providing more and better information, with less time consumed.

b. Can collect pertinent data concerning program operations using observation schedules, interview schedules, and checklists, and can show relationships between actual events and projected goals and schedules.

c. Can orally present recommendations for specific alterations in procedures, roles, and schedules to insure that the program will attain the desired ends, utilizing visual, graphic, and other media as needed to clearly communicate changes needed.

UTILIZING SUPPORTING SERVICES

E-1 Analyzing and Securing Services: Given a need for a supporting service, the supervisor can develop a list of sources from which to secure various services, and can describe situations and problems requiring supportive personnel.

a. Can prepare a directory of sources of supporting services available in a community, clearly describing the distinctive services offered by each agency or source.

b. Can survey and describe situations and problems where specialized personnel need to be utilized to enhance the instructional program.

c. Can prepare a plan for involving specialized personnel from within and from outside the district, justifying each involvement in terms of support services needed for improvements.

E-2 Orienting and Utilizing Specialized Personnel: Given a need for specialized assistance, the supervisor can secure the services of a variety of resource persons and can make arrangements for these persons to contribute their unique expertise to improve staff competence in specific areas.

a. Can orient support personnel to the new situation so that he/she can adapt his/her services to meet the needs of the recipients.

b. Can specify within a limited number of alternatives the expected outcomes of the service.

c. Can structure a resource person's task to make maximum use of his/her expertise, while allowing him/her the opportunity to arrange a presentation with which he/she feels comfortable.

d. Can maximize the effectiveness of services by providing evaluative feedback concerning the contributions of resource persons in specialized areas.

E-3 Scheduling Services: Given diagnoses of pupils' needs and regular instructional personnel, the supervisor can propose a set of schedules to distribute services appropriately, to balance the loads of the staff members who provide services, and to provide an opportunity for recipients of the services to maintain maximum involvement in their school programs.

a. Can prepare a service delivery schedule, including the available resources, the services needed and the transportation available.

b. Can select from several proposed schedules the most effective one for meeting students' needs, and can justify the selected schedule in terms of efficiency, economy, feasibility, legality, and other considerations.

c. Can formulate a large scale master plan for the delivery of services showing consideration of staff involved, pupils to be served, services to be rendered, the utilization of time and space, costs involved, and instructional appropriateness.

E-4 Evaluating the Utilization of Services: Given a plan for providing better supporting services within a district, the supervisor can compare that plan with the current operation by utilizing objective data gathered in accordance with previously identified criteria and can propose recommendations that would increase the effectiveness and quality of the system.

a. Can specify criteria for evaluating the utilization of supporting services.

b. Can gather evaluative data concerning the effectiveness of the utilization of supporting services.

c. Can use the evaluative data to compare the current operation with the proposed goals.

PROVIDING IN-SERVICE EDUCATION

F-1 Supervising in a Clinical Mode: Given a teacher experiencing difficulties within a classroom, the supervisor can lead the teacher through a clinical cycle using classroom observation data, non-directive feedback techniques, and various planning and in-service experiences to produce significantly improved teacher behavior.

a. Can use more than one observation system to record objective data during live or taped teaching situations.

b. Can use objective observation data to provide feedback to the teacher and to evaluate periodically the teacher improvement process.

c. Can instruct a teacher to use various observation instruments so that he/she can become familiar with the systematic observation process.

d. Can select and arrange for special opportunities for a teacher to learn to change classroom practices as indicated by cooperative planning.

F-2 Planning for Individual Growth: Given a teacher and data concerning various facets of his/her on-the-job performance, the supervisor can assist the teacher in establishing individual professional growth plans which include objectives for change in classroom practices, a schedule of experiences sequenced for continuous stimulation and growth, criteria specified for interim and terminal evaluation, and a specified period for accomplishing the objectives.

a. Can instruct a teacher to write behavioral change objectives using terms that depict observable behavior or professional significance.

b. Can use PERT or other planning systems to plan and guide sequenced activities leading to a predetermined goal.

c. Can utilize cooperative planning procedures that involve the teacher in the formulation and implementation of an individual professional growth plan extending over several months.

d. Can assist the teacher in determining procedures for objectively evaluating personal growth.

F-3 Designing In-Service Training Sessions: Given a description of a specific staff group, including description of their needs for training, the supervisor can design or adapt a training session plan specifying objectives, activities, procedures, materials, and methods for evaluation to assure participant interest, involvement, and learning.

a. Can specify clearly and state in advance of a session the expected outcomes for participants in terms of professional practices.

b. Can design a complete training session with carefully described, logically sequenced activities and supportive materials, all appropriate to specified outcomes.

c. Can describe follow-up activities that will allow session participants to practice, improve, solidify and/or retain what they have learned during a session.

d. Can design instrument(s) for gathering data on both outcomes and processes of a session, and can describe procedures for analyzing such data.

F-4 Conducting In-Service Training Sessions: Given a description of a specific staff group, the supervisor can select an appropriate training plan, make arrangements, and lead participants through a sequence of meaningful learning activities.

a. Can establish in participants a psychological "set" or readiness for the activities and events associated with a program.

b. Can guide and direct activities in ways that maintain participant interest and involvement.

c. Can demonstrate sensitivity to participants' feelings and personal concerns during a session, without being diverted from planned activities and outcomes.

d. Can build group cohesion, encourage and support spontaneous interactions, and project enthusiasm.

F-5 Training for Leadership Roles: Given individuals who have demonstrated both a high level of competence in a specific area and emergent leadership capabilities, the supervisor can train these people to conduct in-service sessions and to provide follow-up activities that result in the improvement of instructional skills.

a. Can identify skills or abilities of potential leaders and match them to training requirements.

b. Can demonstrate basic leadership techniques from which participants can learn.

c. Can organize and direct training sessions for potential leaders, using micro-teaching, role-playing, videotaping, and in-service simulations.

d. Can provide participants with evaluative feedback that will assist them in becoming more effective in their leadership roles.

RELATING TO PUBLIC

G-1 Informing the Public: The supervisor can establish, promote and maintain favorable impressions of public school programs among community members by disseminating school information through the public media, by speaking to public and school groups, by conferring with parents and other interested individuals, and by meeting, as necessary, with community groups and leaders.

a. Can select and synthesize school program information and arrange for its dissemination via oral and written presentations and use of mass media channels.

b. Can establish good rapport with the public and stimulate a high interest level in education on the part of parents and other community individuals or groups.

c. Can guide staff personnel to initiate more public contacts, to establish rapport, and to provide better information about the school program.

G-2 Involving the Public: The supervisor can plan ways in which parents and other interested individuals can become productively involved in and trained to assist at various levels of the special education program.

a. Can develop a systematic recruitment program for obtaining parent and community volunteers to assist in various aspects of the school program.

b. Can prepare packets of material that would assist individuals in gaining information about volunteer activities in the school.

c. Can develop a plan for assigning and scheduling volunteer workers in the area of their expertise and/or where they are needed most in the school program.

G-3 Utilizing Public Opinion: Given public opinion data regarding a special education matter, the supervisor can establish the urgency of the topic, determine the validity of the data, and, as appropriate, utilize the data in the decision-making process regarding initiation of new aspects, or the maintenance, revision, or discontinuation of current programs or practices.

a. Can arrange for sampling opinions, utilizing appropriate survey instruments and statistical procedures, and can make proper inferences from data collected.

b. Can analyze attitudes and opinions of recognized leaders and informal groups within the local community.

c. Can utilize public opinion data in making decisions about curriculum changes and/or other aspects of the school program.

APPENDIX C

DEVELOPING LOCAL NORMS FOR PRACTITIONER IMPORTANCE VARIABLE

Procedures can be relatively elaborate or less so depending upon the sophistication desired. If some crude central tendency of importance estimates is suitable, then a sampling of pertinent individuals in deriving a mean rank will suffice. If more carefully stratefied samples are desired, these can be secured so long as at least fifteen or more respondents are included in each strata. Finally, if genuine concensus is desired, rather elaborate procedures may be used and the Delphi technique along with study groups may be needed.

The two simplest procedures are outlined below:

Simple Mean of a Random Sample

1. Identify all personnel believed to be knowledgeable enough to be included in the survey.

2. Randomly sample the total group to produce no fewer than twenty subjects and up to one hundred or more depending upon the size and diversity of the total group.

3. Have selected respondents rank all twenty four Critical Competency statements from #1 "most important for an instructional leader serving our school needs well," to #24, "least important for an instructional leader serving our needs well."

4. Compute a mean rank value for each of the 24 Critical Competencies.

5. Using those mean rank values, identify the four to six Critical Competencies with lowest mean ranks and designate them as "H," highly important. Identify the two to four Critical Competencies with the largest mean ranks and designate them as "L," lowest in importance.

Finally, take the remaining 16 to 18 Critical Competencies, and sort them into four groups of four or five each using mean ranks to form groups that have similar scores. Designate the lowest of these four groups all as "MH," and the highest of these four as "ML." Then designate the two remaining middle groups as "M."

Stratefied Samples

The same procedures are used in arriving at importance values with stratefied samples except the procedures are applied separately to each sample.

Samples should be drawn from among each referent group or groups that might be especially important to an assessee. For instance, central office supervisors, coordinators and consultants may want a norm group sampled that includes a cross-section of teachers, principals and directors of programs. A norm group of usefulness to elementary principals might be teachers and elementary supervisors and directors who function in their schools. Secondary subject-matter specialists might find a sample of secondary principals, department chairmen, secondary teachers and their peers a useful norm group.

In each case, a sample of twenty or more subjects is drawn at random from a population that is defined to include all of those people whose estimates of importance are regarded as knowledgeable.

APPENDIX D

SPECIAL EDUCATION SUPERVISOR TRAINING PROJECT

PERSONNEL

Project Co-Directors

Ben M. Harris, Professor of Educational Administration

John D. King, Chairman of Special Education Department and Professor of Special Education and Educational Administration

Faculty

E. Wailand Bessent, Professor of Educational Administration (1972-73)

Lawrence W. Marrs, Assistant Professor of Special Education and Educational Administration (1972-74)

William A. Myers, Associate Professor of Special Education (1973-75)

Martha S. Williams, Associate Professor of Social Work (1972-75)

J. Bradley Wilson, Assistant Professor of Special Education and Educational Administration (1972-73)

James R. Yates, Associate Professor of Special Education Administration and Educational Administration (1974-75)

Project Coordinator

Darryl R. Townsend, Ph. D. (June 1973-September 1974)

Special Consultants

E. Wailand Bessent, Professor of Educational Administration
(1973-75)

Hayes Prothro, Chief Consultant, Special Education Personnel
Development, Texas Education Agency
(1972-75)

Faculty Supervisors (In Addition to SEST Faculty)

E. Wailand Bessent, Professor of Educational Administration
(1974-75)

Kenneth McIntyre, Professor of Educational Administration
(1974-75)

Leonard Valverde, Assistant Professor of Educational Administration
(1974-75)

Other Staff

1972-73	1973-74	1974-75
Jo Ann Anderson	Joan DeLuca	Narveline Drennan
Authella Bessent	Jane Duckett	Michael C. Evans
Paulette Gibbs	Gary Hales	Corine Martinez
William J. Holden	Howard Sanford	Richard Palmer
Harland M. Irvin, Jr.		Eliseo Ruiz
Nova C. Smith		Howard Sanford
Darryl R. Townsend		
Jeanette Walker		

Secretarial Staff

Melchor Aguirre	Linda Guerrero	Patricia Skipper	Joy Yong
Imelda Aleman	Barbara Lightsey	Cynthia Williams	

Field Supervisors

Austin Independent School District:

- Dr. Tom Hinojosa, Director of Special Education
- Mr. Derly Rivera, Assistant Personnel Director
- Violet Beaty (1974-75)
- Carolyn Davis (1973-74)
- Ruth Douglas (1974-75)
- Pauline Frey (1973-74)
- Margaret Gately (1973-75)
- Deborah Gleason (1974-75)
- Roberta Grandberry (1974-75)
- Billie Martin (1973-75)
- Ann Neidhart (1974-75)
- Lester Mays (1973-74)
- Ruth McAllister (1973-74)
- Margaret Owens (1974-75)
- Dee Peter (1973-74)
- Bennett Scott (1973-74)
- Gem Stokes (1973-75)
- Hy Traurig (1974-75)
- Margaret Webster (1973-75)
- Elaine Wilson (1974-75)

Balcones Special Education Cooperative:

- Earl Humphreys (1973-74)

Hays Consolidated School District:

- Irene Helton (1973-74)
- William M. Johnson (1973-74)

Texas Education Agency:

- Jerry Vlasak (1974-75)

Region XIII Education Service Center:

- Helen Almanza (1973-75)
- Dan Bonner (1974-75)
- Barry Klein (1973-74)
- Ann Sanders (1974-75)
- Ben Wallace (1973-74)

The University of Texas:

- Marjane Auld (1974-75)

Meridell Achievement Center:

- Grady Tumlinson (1974-75)

Student-Interns

1973-74	1974-75
Vicki Curtis	Gwendolyn Carter
Wanda Elliott	Carol Giesecke
Deborah Ernsberger	Patricia Griner
Deborah Gleason	Sharon Guajardo
Sue Garcia	Laurie Hunt
Sylvia Little	Patricia Miller
Nell Martin	Jim Sanders
Turner Oates	Frances Stetson
Jeanette Walker	Carolyn Williams
Pam Young	

Appendix E

ILLUSTRATIVE ORIENTATION SESSION AGENDA

Time (minutes)	Activity	Materials
Prior to scheduled meeting	Distribute list of all competencies taken from Document #7.	Document #7, pp.54-56
	Distribute CCPI to be completed by assessees.	CCPI, CCPI-1, CCPI-2
	Display all competency assessment materials	All instruments plus manuals and workbooks
(0)	Introductory comments about use of competency assessment data for improvement purposes. Stress following points: (1) Only instructional leadership competencies being assessed. (2) Assessment is largely self-administered; hence, the results will depende upon assessees. (3) No prescriptions offered, but clearly prioritized competency needs are identified. (4) Completion of instruments and analysis process is time consuming, about 5-6 hours, but essential.	
(20)	Outline of plan of action (1) Self-administration of MCAI, CKEI, and CCIS. (2) Group administration and scoring of KAT. (3) Individual completion of Workbook. (4) Planning conferences with an advisor, colleague, instructor, or other resource person.	Schedule of activities
(35)	Distribute instruments for self-administration. Comment briefly on component parts of each instrument. Stress use of work sheet for each, while returning other materials unmarked. Stress special procedures for using card in Q-sort procedures for the MCAI.	MCAI set, CKEI set, and CCIS
(60)	Questions	
(75)	Summary and Review Reemphasize self-assessment as a privilege and responsibility directed toward competence development. Review schedule of events, stressing date and time when group administration of KAT is planned as the last step in data gathering.	
(90)	Adjourn	

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APPENDIX F

OUTLINE OF EVENTS FOR
COMPETENCY ANALYSIS SESSIONS

Feb. 2-3 O. Pre-Session Events

Feb. 4 I. Introducing Competency Assessment

Feb. 4 II. Knowledge Assessment

Feb. 5-11 III. Interim Session Activities - Data Gathering

Feb. 12 IV. Competency Analysis

10:30 to 2:30 Sharing of impressions or problems to date.

Distribution of Workbook for Pre-Assessment

Independent self-analysis activities (break for lunch, each on his or her own time schedule. Those working more slowly return earlier than others.)

Feb. 12 V. Discussing implications

3:00 to 4:00 Lecture on interpreting diagnosed needs, meaning of the term "deficiency," cautions in using results, and the logic of the system.

Questions and discussion of problems and concerns

Briefing on next steps in using the CKEI for planning.

Feb. 13 VI. Planning for Growth

9:00 to 12:30 Lecture on planning procedures to produce growth plans based on diagnosis.

Questions and discussion

Peer Planning Task Groups formed to permit 3 to 5 individuals to share in developing a growth plan for one "volunteer."

Summary

Adjourn

APPENDIX G

Table of Practitioner
Importance Levels Derived
From A National Survey*

Practitioner Importance Levels

Special Education Supervisors in the United States

Critical Competency Number	Practitioner Importance Level
A-1	M
A-2	ML
A-3	M
B-1	ML
B-2	ML
B-3	L
C-1	H
C-2	H
C-3	MH
D-1	M
D-2	L
D-3	M

Critical Competency Number	Practitioner Importance Level
E-1	MH
E-2	MH
E-3	M
E-4	M
F-1	H
F-2	MH
F-3	ML
F-4	M
F-5	MH
G-1	H
G-2	M
G-3	L

*Source: Data adapted from finding by Susan Grueber, Regional Differences in Ranking of SEST Critical Competencies for Special Education Supervisors, Unpublished dissertation, University of Denver, Colorado 1974.

END